Company Profile
Icom, the wireless communications experts

Icom Inc. is a wireless communications equipment manufacturing company located in Osaka, Japan. Since Icom’s establishment in 1954, we've had a long record as a trusted manufacturer of land mobile radio, amateur radio, marine radio, navigation products, aviation radio and communications receivers.

Quality & Reliability

Icom quality and Icom reliability

Over 60 years of engineering and production excellence is a part of every Icom product. Using the latest equipment, Icom radios are engineered to pass rigorous in-house tests as well as environmental tests to U.S. Military standard 810 specifications.

Dust Protection Test
Air Leak Test

Production

Made in Japan quality

Icom is a rare example of an electronics manufacturer that has not shifted production to lower cost countries, but kept its production base in Japan. The Wakayama Icom plants have advanced production systems to produce small volume/multi-model wireless communication products.

Icom brand

Icom, world brand name

Icom is recognized as a reliable two-way radio global brand name around the world with a reputation for rugged quality products. Our land mobile radios are used by many professional organizations worldwide including military forces, local governments, utilities, transportation/airports, security firms, and many other users.

Network

Icom’s worldwide network

Icom products are sold in over 80 countries around the world. Icom has an international sales and service network, including sales subsidiaries in the United States, Australia, Germany, Spain and China. Icom is here to support and service our products and your communication needs.
PROFESSIONAL COMMUNICATIONS PRODUCTS LINEUP

Satellite PTT

P25 Digital Radios

IDAS™ Radios (NXDN™ Type-D Compatible)

Analog Radios

IP Advanced Radio Systems

Data Radios

RolP Gateway

HF Radios
Satellite Push-To-Talk Radio

REAL-TIME, ONE-TO-MANY GLOBAL COMMUNICATION WITH ONE PUSH OF THE PTT

IC-SAT100

FEATURES

- Uses the Iridium® satellite network
- Total global coverage, including the Poles*
- One-to-many communication
- Priority interrupt calling
- Emergency button
- 1500 mW powerful audio
- Multiple languages (Chinese, English, French, Japanese, and Spanish)
- Interoperability with IDAS™ and analog radios through the optional VE-PG4, RoIP gateway (Planned feature)

- Short data messages (SDM)
- SMA type antenna connector for an external antenna
- USB interface (for charging and data communications)
- 14-pin type accessories connector
- High reliability made in Japan Li-ion battery pack
- Two programmable function keys
- Talkgroup scan
- Compatible with Iridium Extreme® PTT

* Depending on country or region, carrying and/or use of the IC-SAT100 may be prohibited.

Supplied Accessories
- BP-300, battery pack
- MBB-5, belt clip
- FA-S102U, antenna
- BC-241, desktop charger
- BC-242, AC adapter

### FEATURES

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IC-F7010T/S (5 W)

**VHF P25 DIGITAL TRANSCEIVERS**

- **IC-F7020T/S** (5 W)
- **IC-F7040T/S** (3 W)

**P25 PHASE 1 AND 2**

**SMALLEST AND LIGHTEST OF ITS CLASS**

**FEATURES**

- Individual and group call
- Unit ID and talkgroup display on receive
- Status update and status query
- Radio stun/kill/revive
- Remote monitor
- Radio check
- Call alert
- Call log
- Emergency
- OTAR (Over-the-Air Rekeying)
- Analog inversion voice scrambler
- Mixed mode operation
- DTMF autodial
- 2-Tone, CTCSS and DTCS
- MDC 1200 compatible
- Quick A/B/C and toggle switches on the top panel
- 4-way navigation cross keypad* (* IC-F9011T/S, F9021T/S only.)
- Internal clock
- 136–174 MHz, 6 W
- 380–470, 450–520 MHz, 5 W
- 512 memory channels with 128 zones
- 1000 mW audio output (internal speaker)

**SUPPLIED ACCESSORIES**

- BP-254, battery pack
- MB-115, belt clip
- Antenna

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IC-F9011T/S/B (6 W)

**UHF P25 DIGITAL TRANSCEIVERS**

- **IC-F9020T/S** (5 W)
- **IC-F9040T/S** (3 W)

**P25 PHASE 1 TRUNKING AND P25 CONVENTIONAL MODES**

**FEATURES**

- Individual and group call
- Unit ID and talkgroup display on receive
- Status update and status query
- Radio stun/kill/revive
- Remote monitor
- Radio check
- Page call
- Emergency
- OTAP (Over-the-Air Programming) function* (* Optional CS-OTPM2 software required.)
- OTAR (Over-the-Air Rekeying)
- Analog inversion voice scrambler (16-codes)
- Front panel programming option* (* ISL-P25FP, license key required.)
- Advanced System Key (ASK) protects the radio from unauthorized programming
- Mixed mode operation
- Digital voice recording to a microSD card
- 2-Tone, CTCSS and DTCS
- DTMF autodial
- MDC 1200 compatible
- Quick A/B switch on the top panel programmable
- Digital voice recording to a microSD card
- USB port for PC connection
- Audio equalizer
- Volume equalizing function
- Active noise canceller
- Menu and function item localization
- Internal clock
- Optional BC-225 intelligent charger and RS-BC22S reader software
- 136–174 MHz, 380–470, 450–520 MHz, 5 W versions* (* Some frequency ranges do not have FCC certification.)
- 3 W versions
- 1024 memory channels with 128 zones
- 1300 mW audio output (internal speaker)

**SUPPLIED ACCESSORIES**

- BP-254, battery pack
- MB-115, belt clip
- Antenna

* May differ or not supplied, depending on the transceiver version.
P25 Digital Mobile Radios

VHF P25 DIGITAL TRANSCIEVER
IC-F7510 (50 W)
UHF P25 DIGITAL TRANSCIEVER
IC-F7520 (45 W)
700/800 MHz P25 DIGITAL TRANSCIEVER
IC-F7540 (30 W/35 W)

GREAT CHOICE FOR PUBLIC ORGANIZATIONS
RUGGED P25 MOBILE RADIO, PHASE 1 AND 2

FEATURES
• Individual and group call
• Unit ID and talkgroup display on receive
• Status update and status query
• Radio inhibit/uninhibit
• Remote monitor
• Radio check
• Page call
• Emergency
• OTAP (Over-the-Air Programming)* (* Optional CS-OTPM2 software required.)
• OTAR (Over-the-Air Rekeying)
• Analog inversion voice scrambler (16-codes)
• Front panel programming option* (* ISL-P25FP, license key required.)
• Advanced System Key (ASK) protects the radio from unauthorized programming
• Mixed mode operation
• DTMF autodial
• 2-Tone, CTCSS and DTCS
• MDC 1200 compatible
• Digital voice recording to a microSD card
• D-SUB 25-pin ACC connector
• Internal clock
• Optional detached controller, dual head or COMMANDMIC™ configurations (See Page 11 for details)
• 136–174, 380–470, 450–512 and 450–520 MHz versions* (* Some frequency ranges do not have FCC certification.)
• 700/800 MHz, 30/35 W versions
• 1024 memory channels with 128 zones
• 20 W audio amplifier

Supplied Accessories
• HM-220, hand microphone
• DC power cable
• Mounting bracket kit
• Microphone hanger

*1 ISL-P55DS and UX-241 required. *2 A microSD card is required.
*3 UT-125FIPS required for DES. UT-125FIPS and ISL-P55AES required for AES.

VHF P25 DIGITAL TRANSCIEVER
IC-F9511HT (110 W)

110 W RF POWER, P25 TRUNKING AND P25 CONVENTIONAL MODES

FEATURES
• Individual and group call
• Unit ID and talkgroup display on receive
• Status update and status query
• Radio inhibit/uninhibit
• Remote monitor
• Radio check
• Page call
• Emergency
• OTAP (Over-the-Air Rekeying)
• Analog inversion voice scrambler
• Mixed mode operation
• DTMF autodial
• 2-Tone, CTCSS and DTCS
• MDC 1200 compatible
• Digital voice recording to a microSD card
• D-SUB 25-pin ACC connector
• Internal clock
• Optional HM-211 active noise canceling microphone
• 136–174 MHz, 110 W at 20% duty cycle operation
• 512 memory channels with 128 zones
• 15 W audio amplifier

Supplied Accessories
• HM-148G, hand microphone
• DC power cable
• Mounting bracket kit
• Microphone hanger
• Separation cable (5 m)

Photo includes optional SP-30.
P25 Digital Mobile Radios

VHF P25 DIGITAL TRANSCEIVERS
IC–F9511T/S (60 W)

UHF P25 DIGITAL TRANSCEIVERS
IC–F9521T/S (50 W)

P25 PHASE 1 TRUNKING AND P25 CONVENTIONAL MODES

IC-F9511S

IC-F9511T

FEATURES

- Individual and group call
- Unit ID and talkgroup display on receive
- Status update and status query
- Radio inhibit/uninhibit
- Remote monitor
- Radio check
- Page call
- Emergency
- OTAR (Over-the-Air Rekeying)
- Analog inversion voice scrambler
- Mixed mode operation
- DTMF autodial
- 2-Tone, CTCSS and DTCS
- MDC 1200 compatible
- D-SUB 25-pin ACC connector

- Internal clock
- Optional HM-211 active noise canceling microphone
- Optional detachable controller
- 136–174 MHz, 400–470 and 450–512 MHz, 50 W versions
- 22 W audio amplifier

Supplied Accessories
- HM-148G, hand microphone
- DC power cable
- Mounting bracket kit
- Microphone hanger
- SP-35, external speaker (* IC-F9511T, IC-F9521T only.)

P25 Digital Repeaters

VHF P25 DIGITAL REPEATER
IC–FR9010
(110 W, 100% duty)

UHF P25 DIGITAL REPEATER
IC–FR9020
(100 W, 100% duty)

P25 CONVENTIONAL REPEATER FOR REPEATER AND BASE MODES

IC-FR9010

IC-FR9020

FEATURES

- Individual and group call
- Status update and status request
- Radio inhibit/uninhibit
- Radio check
- Call alert
- SBC log (Call log)
- Radio monitor
- Emergency (* Conventional base mode.)
- 4-line x 20-character display
- PC programmable
- D-SUB 25-pin accessory connector for remote control
- CW-ID transmission
- DTMF encode
- CTCSS and DTCS
- P25 conventional/FM mixed mode operation
- Built-in speaker
- P25 self-test mode and key test mode
- Automatic error detection
- High reliability, rugged construction
- 146–174 MHz, 110 W
- 440–475 MHz, 100 W
- 110 W/100 W (VHF/UHF) output power at 100% duty cycle operation
- 500 memory channels capacity and 16 key buttons

Supplied Accessories
- DC power cable connector

OTAP Manager

OTAP MANAGER
CS–OTPM2

EASILY RECONFIGURE RADIOS WITH OVER-THE-AIR PROGRAMMING

FEATURES

- Remotely reconfigure radios while in the field

- Radios can reconfigure in a short period of time by transmitting only the updates
- Single programming data can transmit to a whole fleet with only one click
- Up to 10,000 sessions are logged for review and rescheduling
- Both original and new data can be kept in the radios until the OTAP process is completed
- System operator can change language setting of CS-OTPM2
- Manages up to 100,000 radios

Supplied Accessories
- USB dongle supplied with the software

Compatible models
- IC-F7010 series
- IC-F7020 series
- IC-F7040 series
- IC-F7510
- IC-F7520
- IC-F7540
**IDAS™ Handheld Radios**

**Multi-site Conventional**

- 6.25 kHz digital migration
- Digital/analog mixed mode operation
- Up to 16 IDAS repeater sites connection over an IP network
- RC-FS10, remote communicator
- Telephone interconnection (with VE-PG4)

**Type-D Multi-site Trunking**

- Distributed channel system which does not use a dedicated control channel
- Up to 30 channels per site and up to 48 sites connection over an IP network
- Up to 60,000 individual IDs and 60,000 group IDs with fleet management
- Automatic site roaming
- ESN authentication
- RC-FS10, remote communicator
- RS-MGR1 system manager
- Telephone interconnection (with VE-PG4)

**FEATURES**

- Individual and group call
- PTT ID and ANI
- Status and message
- Radio Kill, Stun and Revive
- Remote monitor
- Radio check
- Call alert
- Emergency
- Digital voice scrambler
- OTAR (Over-The-Air-Rekeying)
- Optional CS-OTAR1 software required
- Voting scan
- Transparent data
- Digital/analog mixed mode operation
- DTMF autodial and decoder
- MDC 1200 compatible
- Basic LTR™ trunking
- 2-Tone, CTCSS and DTCS
- USB port for PC connection
- AquaQuake™ function
- Audio equalizer
- Digital voice recording to a microSD card
- Active noise canceller
- Menu and function item localization
- Internal clock
- Optional BC-225 intelligent charger and RS-BC225 reader software
- 1024 memory channels with 128 zones (IC-F3400D/F4400D: 32 memory channels)
- 4000 memory channels with optional ISL-CHEX license key
- 1300 mW audio output (internal speaker)

** Supplied Accessories**

- BP-283, battery pack
- MB-133, belt clip

**IDAS™ THE SMART DIGITAL SOLUTION**

- VOICE RECORDING
- INTEGRATED GPS
- WATERPROOF & DUST-TIGHT
- MIL-STD 810
- 10.5 HOURS BATTERY LIFE
- BLUETOOTH®

- OTAP (OVER-THE-AIR PROGRAMMING)

- AES/DES CRYPTOGRAPHY

- 1300 mW audio output (internal speaker)

*1 A microSD card is required.
*2 Optional UT-134 required for 64-key DES.
Optional UT-134 and ISL-AKAES license key required for AES.
IDAS™ Handheld Radios

COMPACT, WATERPROOF AND SUPERIOR AUDIO CLARITY

VHF DIGITAL TRANSCEIVERS
IC-F1100DT/DS/D (5W)
IC-F2100DT/DS/D (5W/4W)

FEATURES
• Individual and group call • PTT ID and ANI • Status and message • Radio Kill, Stun and Revive • Remote monitor • Radio check • Call alert • Emergency • Digital voice scrambler • Voting scan • Transparent data • Digital/analog mixed mode operation • DTMF autodial and decoder • MDC 1200 compatible • Basic LTR™ trunking • 2-Tone, CTCSS and DTCS • Optional HM-233GP GPS speaker-microphone • Inversion voice scrambler (analog) • Audio equalizer • Active noise canceller • Menu and function item localization • AquaQuake™ function • Optional BC-225 intelligent charger and RS-BC225S reader software • 136–174, 350–400, 400–470, 450–512 and 450–520 MHz, 4 W versions* (* Some frequency ranges do not have FCC certification.) • 512 memory channels with 128 zones • 1300 mW audio output (internal speaker)

Supplied Accessories
• BP-290, battery pack • MBB-3, belt clip

COMPACT, WATERPROOF AND SUPERIOR AUDIO CLARITY

VHF DIGITAL TRANSCEIVERS
IC-F52D (5W)
IC-F62D (5W)

5 W POWER PACK SUPER COMPACT BODY

FEATURES
• Individual and group call • PTT ID and ANI • Status and message • Radio Kill, Stun and Revive • Remote monitor • Radio check • Call alert • Emergency • Digital voice scrambler • Voting scan • Digital/analog mixed mode operation • DTMF autodial and decoder • MDC 1200 compatible • Basic LTR™ trunking • 2-Tone, CTCSS and DTCS • Optional -- • Active noise canceller • Menu and function item localization • AquaQuake™ function • Optional BC-225 intelligent charger and RS-BC225S reader software • 136–174, 350–400, 400–470, 450–512 and 450–520 MHz, 5 W versions** (Some frequency ranges do not have FCC certification.) • 512 memory channels with 128 zones • 1300 mW audio output (internal speaker)

Supplied Accessories
• BP-290, battery pack • MBB-3, belt clip

* May differ or not supplied, depending on the transceiver version.
**IDAS™ Handheld Radios**

### VHF DIGITAL TRANSCEIVERS
- **IC-F3261DT/DS** (5 W)
- **IC-F3263DT/DS** (5 W)
- **IC-F4261DT/DS** (5 W)
- **IC-F4263DT/DS** (5 W)

#### Supplied Accessories
- BP-232WP, battery pack
- MB-94R, belt clip
- Antenna

#### FEATURES
- Individual and group call
- PTT ID and ANI
- Status and short data message (SDM)
- Radio Kill, Stun and Revive
- Remote monitor
- Radio check
- Call alert
- Emergency
- Digital voice scrambler
- Votning scan
- Digital/analog mixed mode operation
- DTMF autodial and decoder
- MDC 1200 compatible
- Basic LTR™ trunking
- 2-Tone, CTCSS and DTCS
- Inversion voice scrambler (analog)
- 136–174, 350–400, 400–470, 450–512 and 450–520 MHz, 5 W (*) (Some frequency ranges do not have FCC certification.)
- 512 memory channels with 128 zones
- 800 mW (typ.) loud audio (internal speaker)

*Functions are not installed depending on version.*

### UHF DIGITAL TRANSCEIVERS
- **IC-F4210D** (4 W)

#### Supplied Accessories
- BP-265, battery pack
- MB-124, belt clip
- BC-193, desktop charger
- BC-123SA/SE, AC adapter
- Antenna

* May differ or not supplied, depending on the transceiver version.

### FIELD-PROVEN DIGITAL RADIO WITH GPS
- **IC-F3210D** (5 W)

#### Supplied Accessories
- BP-265, battery pack
- MB-124, belt clip
- Antenna

#### FEATURES
- Individual and group call
- PTT ID and ANI
- Status and short data message (SDM)
- Radio Kill, Stun and Revive
- Remote monitor
- Radio check
- Call alert
- Emergency
- Digital voice scrambler
- Votning scan
- Digital/analog mixed mode operation
- DTMF autodial and decoder
- MDC 1200 compatible
- Basic LTR™ trunking
- 2-Tone, CTCSS and DTCS
- Inversion voice scrambler (analog)
- 136–174, 350–400, 400–470, 450–512 and 450–520 MHz, 5 W (*) (Some frequency ranges do not have FCC certification.)
- 512 memory channels with 128 zones
- 800 mW (typ.) loud audio (internal speaker)

*IC-F3230DT/F4230DT is not available in some countries. (Not available in the USA.)*

### WATERPROOF TYPE-D MULTI-SITE TRUNKING RADIO
- **IC-F3230DT** (5 W)
- **IC-F4230DT** (4 W)

#### Supplied Accessories
- BP-232WP, battery pack
- MB-94R, belt clip
- Antenna

#### FEATURES
- Individual and group call
- PTT ID and ANI
- Status and short data message (SDM)
- Radio Kill, Stun and Revive
- Remote monitor
- Radio check
- Call alert
- Emergency
- Digital voice scrambler
- Votning scan
- Digital/analog mixed mode operation
- DTMF autodial and decoder
- MDC 1200 compatible
- Basic LTR™ trunking
- 2-Tone, CTCSS and DTCS
- Inversion voice scrambler (analog)
- 136–174, 350–400, 400–470, 450–512 and 450–520 MHz, 5 W (*) (Some frequency ranges do not have FCC certification.)
- 512 memory channels with 128 zones
- 800 mW (typ.) loud audio (internal speaker)

**Note:** Some frequency ranges do not have FCC certification.

### SIMPLE TYPE-D MULTI-SITE TRUNKING RADIO
- **IC-F3210D** (5 W)

#### Supplied Accessories
- BP-265, battery pack
- MB-124, belt clip
- BC-193, desktop charger
- BC-123SA/SE, AC adapter
- Antenna

* May differ or not supplied, depending on the transceiver version.
VHF DIGITAL TRANSCEIVERS

**IC-F3201DEX (1 W)**

**IC-F3203DEX (1 W)**

UHF DIGITAL TRANSCEIVERS

**IC-F4201DEX (1 W)**

**IC-F4203DEX (1 W)**

**IECEx/ATEX INTRINSICALLY SAFE DIGITAL RADIO**

- **IEC Certifications**
  - Mining: Ex ib I Mb
  - Gas: Ex ib IIC T4 Gb
  - Dust: Ex ib IIIC T110°C Db
  - –20°C ≤ Ta ≤ +55°C

- **ATEX Certifications**
  - Mining: I M2 Ex ib I Mb
  - Gas: II 2G Ex ib IIC T4 Gb
  - Dust: II 2D Ex ib IIIC T110°C Db
  - –20°C ≤ Ta ≤ +55°C

**VHF DIGITAL TRANSCEIVER**

**IC-F52D-UL (5 W)**

**IC-F62D-UL (5 W)**

**5 W OUTPUT POWER FOR HAZARDOUS LOCATIONS**

**FEATURES**

- Individual and group call
- PTT ID (TX)
- Power ON/OFF status call (TX)
- Radio Kill, Stun, and Revive (RX)
- Remote monitor (RX)
- Radio check (RX)
- Call alert (RX)
- Emergency (TX)

- Digital voice scrambler
- Voting scan
- Digital/analog mixed mode operation
- 2-Tone, CTCSS and DTCS
- DTMF autodial
- Low electrical resistivity body: Carrying case is not required
- MDC 1200 PTT ID and emergency transmission
- Optional HM-203EX speaker-microphone

**Supplied Accessories**

- BP-277EX, battery pack
- MB-94EX, belt clip
- Antenna
- BC-212EX, desktop charger
- BC-12SA/SE, AC adapter*

* May differ depending on the transceiver version.

**IC-F62D-UL**

**FEATURES**

- Individual and group call
- PTT ID and ANI
- Status and message
- Radio Kill, Stun and Revive
- Remote monitor
- Radio check
- Call alert
- Emergency
- Digital voice scrambler
- Voting scan
- Transparent data
- Digital/analog mixed mode operation
- DTMF autodial and decoder
- MDC 1200 compatible
- Basic LTR™ trunking
- 2-Tone, CTCSS and DTCS
- Inversion voice scrambler (analog)
- Audio equalizer
- Active noise canceller
- Menu and function item localization
- AquaQuake™ function
- Optional BC-225 intelligent charger and RS-BC225 reader software
- 512 memory channels with 128 zones
- 1300 mW audio output (internal speaker)

**Supplied Accessories**

- BP-292UL, battery pack
- MBB-3, belt clip

**DO NOT use the transceiver with any other equipment not specified in the option list (Pages 22–26). Please ask your dealer to ensure the hazardous locations ratings are acceptable for the intended place of use.**
IDAS™ Mobile Radios

VHF DIGITAL TRANSCEIVERS
IC-F5400D/DS (90 W)
UHF DIGITAL TRANSCEIVERS
IC-F6400D/DS (45 W)

SUPERB PERFORMANCE AND A COMPREHENSIVE RANGE OF FEATURES

- Individual and group call
- PTT ID and ANI
- Status and message
- Radio Kill, Stun and Revive
- Remote monitor
- Radio check
- Call alert
- Emergency
- Power OFF emergency
- Digital voice scrambler
- OTA (Over-The-Air-Rekeying)
- * Optional CS-OTAR1 software required.
- Voting scan
- DTMF autodial and decoder
- Status and message
- MDC 1200 compatible
- Basic LTR™ trunking
- 2-Tone, CTCSS and DTCS
- Digital voice recording to a microSD card
- USB port for PC connection
- Ignition line
- D-SUB 25-pin ACC connector
- 20 W audio amplifier
- Audio Equalizer
- Active Noise Canceller
- Menu and function item localization
- Internal clock
- Public address and RX speaker functions
- Optional detached controller, dual head or COMMANDMIC™ configurations
- 136–174 MHz, 50 W versions
- 380–470, 450–512 and 450–520 MHz, 45 W versions (* Some frequency ranges do not have FCC certification.)
- 1024 memory channels with 128 zones (IC-F5400DS/F6400DS: 99 memory channels selectable)
- 4000 memory channels with optional ISL-CHEX license key.

Supplied Accessories
- HM-220, Hand microphone
- DC power cable
- Mounting bracket kit
- Microphone hanger

Multiple Controller Configurations*

With a combination with optional separation kits, COMMANDMIC™ and separation cables, three types of controller configurations are available to suit almost any application or installation that may be required.

* Multiple controller configurations are for IC-F5400D/F6400D only.

VERSATILE, MULTI-FUNCTION MOBILE SERIES

VHF ANALOG / DIGITAL TRANSCEIVERS
IC-F5061/D (90 W)
IC-F5063/D (90 W)
UHF ANALOG / DIGITAL TRANSCEIVERS
IC-F6061/D (45 W)
IC-F6063/D (45 W)

FEATURES

- Individual and group call
- PTT ID and ANI
- Status and short data message (SDM)
- Radio Kill, Stun and Revive
- Remote monitor
- Radio check
- Call alert
- Emergency
- Digital voice scrambler
- DTMF autodial and decoder
- MDC 1200 compatible
- Basic LTR™ trunking
- 2-Tone, CTCSS and DTCS
- Inversion voice scrambler (analog)
- Ignition line
- D-SUB 25-pin ACC connector
- Optional HM-211 active noise canceling microphone
- Optional detachable controller
- 136–174 MHz, 50 W versions
- 350–400, 400–470, 450–512 and 450–520 MHz, 45 W versions (* Some frequency ranges do not have FCC certification.)
- 512 memory channels with 128 zones

Supplied Accessories
- HM-220, Hand microphone
- DC power cable
- Mounting bracket kit
- Microphone hanger

* May differ or not supplied, depending on the transceiver version.

*1 UT-126H/HL required for IC-F5061/F5063 and F6061/F6063 (without “D” models).

*2 A microSD card is required.

*3 Optional UT-134 required for 64-key DES. Optional UT-134 and ISL-4AES license key required for AES.
IDAS™ Mobile Radios

VHF DIGITAL TRANSCEIVER
IC-F5220D (50 W)

UHF DIGITAL TRANSCEIVER
IC-F6220D (45 W)

WIDE-AREA COVERAGE
WITH TYPE-D MULTI-SITE TRUNKING

IC-F5220D

FEATURES
• Individual and group call  • PTT ID and ANI  • Status and short data message (SDM)  • Radio Kill, Stun and
Revive (RX)  • Remote monitor (RX)  • Radio check (RX)  • Call alert  • Emergency  • Digital voice scrambler  •
Voting scan  • CTCSS and DTCS  • GPS receiver connection with optional ACC cable  • 8-character al-
phanumeric display  • 4 W (typical) front mounted speaker  • 136–174 MHz, 50 W versions  • 350–400, 400-
470, 450–512 and 450–520 MHz, 45 W versions* (* Some frequency ranges do not have FCC certification.)  •
128 memory channels with 8 zones

Supplied Accessories
• HM-152, hand microphone  • DC power cable  • Mounting bracket kit  • Microphone hanger

VHF DIGITAL TRANSCEIVERS
IC-F5121D (50 W)
IC-F5123D (50 W)

UHF DIGITAL TRANSCEIVERS
IC-F6121D (45 W)
IC-F6123D (45 W)

SOLID FUNDAMENTAL
DIGITAL RADIO

IC-F5121D

FEATURES
• Individual and group call  • PTT ID and ANI  • Status and short data message (SDM)  • Radio Kill, Stun and Re-
vive (RX)  • Remote monitor (RX)  • Radio check (RX)  • Call alert  • Emergency  • Digital voice scrambler  • Vo-
ting scan  • Digital/analog mixed mode operation  • DTMF autodial  • 2-Tone, CTCSS and DTCS  • GPS receiver
connection with optional ACC cable  • 8-character alphanumeric display  • 4 W (typical) front mounted speaker
• Optional HM-211 active noise canceling microphone  • 136–174 MHz, 50 W versions  • 350–400, 400-470, 450–512
and 450–520 MHz, 45 W versions* (* Some frequency ranges do not have FCC certification.)  • 128 memory channels
with 8 zones

Supplied Accessories
• HM-152, hand microphone  • DC power cable  • Mounting bracket kit  • Microphone hanger
IDAS™ Repeaters

VHF REPEATER
IC–FR5000 (50 W)  
UHF REPEATER
IC–FR6000 (50 W)

VALUE, PERFORMANCE AND FLEXIBILITY

FEATURES
- Two RF modules in one unit* (* Optional UR-FR5000 or UR-FR6000 required.)  
- 50 W output power at 50% duty, 25 W at 100% duty operation (Ambient temperature: 25˚C)  
- Optional UR-PA5000 or UR-PA6000 power amplifier provides 100 W output at 50% duty, 50 W at 100% duty operation* (Ambient temperature: 25˚C)  
- UR-PA5000/UR-PA6000 is not available in some countries. Not available in the USA.)  
- Base station operation  
- PC programmable via IP network* (* UC-FR5000 required.)  
- D-SUB 25-pin accessory connector  
- CW-ID transmission  
- 5-Tone, CTCSS and DTCS  
- DTMF encode and decode  
- 32 memory channels capacity  
- Digital voice scrambler  
- Inversion voice scrambler for analog  
- IDAS conventional/FM mixed mode operation  
- Built-in audio Compander for analog  
- 136–174, 350–400, 400–470, 450–512 and 450–520 MHz, 50 W* (* Some frequency ranges do not have FCC certification.)

Supplied Accessories
- DC power cable  
- Key assign stickers

Supplied Accessories
- DC power cable  
- Key assign stickers

IC-FR5200H

50 WATT FULL DUTY CYCLE OPERATION

FEATURES
- 50 Watt Full Duty cycle Operation with the solid heatsink  
- Base station operation  
- PC programmable via IP network* (* Not available depending on the repeater version.)  
- D-SUB 25-pin accessory connector  
- CW-ID transmission  
- 5-Tone, CTCSS and DTCS  
- DTMF encode and decode  
- 32 memory channels capacity  
- Digital voice scrambler  
- Inversion voice scrambler for analog  
- IDAS conventional/FM mixed mode operation  
- Built-in audio Compander for analog  
- 136–174, 350–400, 400–470, 450–512 and 450–520 MHz, 50 W* (* Some frequency ranges do not have FCC certification.)

Supplied Accessories
- DC power cable  
- Key assign stickers

* Optional UC-FR6000 and CF-FR5000MC required for multi-site conventional.  

*3 Multi-site conventional is not available depending on the repeater version.

*4 Type-D trunking is not available depending on the repeater version.
REMOTE COMMUNICATOR

RC-FS10

VIRTUAL RADIO/PC DISPATCH

FEATURES

- PC remote communicator for Type-D multi-site trunking, conventional and analog radio systems
  VE-PG4 is required for analog radio systems.
  - Up to eight different IDAS and analog radio systems can be programmed
  - Up to 40 programmable buttons. Short data message, status and DTMF can be sent
  - Caller ID, called ID, name and call type information are displayed
  - Communication log is displayed and can be stored
  - Optional HM-154 or SM-26 microphone can be used with the RC-F310 Optional CT-23 PTT microphone adapter is required.
  - The CT-24 digital voice converter is supplied with RC-FS10 which converts microphone audio to the AMBE+2™ codec for the IDAS radio system.

Supplied Accessories
- Installation CD
- USB cable
- CT-24, digital converter

SYSTEM MANAGER (For Type-D Multi-Site Trunking)

RS-MGR1

ENHANCE SYSTEM MANAGEMENT FOR TYPE-D TRUNKING SYSTEMS

FEATURES

- Provides real-time monitoring, system alerts and log search functions
  - Repeater properties show condition summary, system information, interface (traffic statistics), repeater condition details and ping status of each repeater
  - Registration log, communication log, traffic log and search log can be searched and downloaded with extensive filter settings
  - Repeater site icons laid out on an image file such as a map or network diagram
  - E-mail alert notification can be sent to the administrator, if an alarm or disconnect occurs or clears
  - The "Mesh ping status" shows the connectivity by sending ping commands in all combinations of repeater sites
  - The "Version list" shows the repeaters firmware revision list

Supplied Accessories
- USB flash drive (Software and hardware key protection)

OTAP MANAGER

CS-OTPM1

EASILY RECONFIGURE RADIOS WITH OVER-THE-AIR PROGRAMMING

FEATURES

- Remotely reconfigure radios while in the field
  - Radios can reconfigure in a short period of time by transmitting only the updates
  - Single programming data can transmit to a whole fleet with only one click
  - Up to 10,000 sessions are logged for review and rescheduling
  - Both original and new data can be kept in the radios until the OTAP process is completed
  - System operator can change language setting of CS-OTPM1
  - Manages up to 100,000 radios

Supplied Accessories
- USB dongle supplied with the software

Compatible models
- IC-F3400D series
- IC-F4400D series
- IC-F5400D series
- IC-F6400D series
- IC-F52D
- IC-F62D
- IC-F52D-UL
- IC-F62D-UL
Supplied Accessories

- BP-279, battery pack
- MB-133, belt clip
- Antenna
- BC-213, desktop charger
- BC-242, AC adapter*

* May differ or not supplied, depending on the transceiver version.

FEATURES

- Compact and slim body (24.5 mm depth)
- Easy to hear in noisy environments
- DTMF autodial
- MDC 1200 PTT ID, Emergency and other limited functions
- BIIS PTT ID and emergency call
- 16 codes inversion voice scrambler
- "Shift key" function
- 136–174 MHz, 5 W
- 335–380, 400–470, 450–512 and 450–520 MHz, 4 W* (* Some frequency ranges do not have FCC certification.)
- 16 memory channels
- 1500 mW loud audio output power (internal speaker) with improved audio clarity

SLIM, COMPACT DIMENSIONS AND IMPROVED AUDIO CLARITY

IC-F1000T

IC-F2000S

IC-F1000

IC-F3001

IC-F3003

IC-F4001

IC-F4003

AFFORDABLE, HIGH PERFORMANCE RADIO

IC-F1000/T/S (5 W)

IC-F2000/T/S (4 W)

VHF TRANSCEIVERS

UHF TRANSCEIVERS

IC-F1000T

IC-F1000

IC-F2000S

IC-F2000

IC-F3001

IC-F3003

IC-F4001

IC-F4003

2-TONE

CTCSS / DTCS

IP67

MIL-STD 810

14 HOURS BATTERY LIFE

(with BP-279)

1500 mW LOUD AUDIO

ICOM's custom made speaker

FEATURES

- DTMF autodial
- MDC 1200 PTT ID and Emergency
- BIIS PTT ID and emergency call
- 16 codes inversion voice scrambler
- Internal VOX capability for hands-free operation
- 136–174 MHz, 5 W
- 350–400, 400–470, 450–512 and 450–520 MHz, 4 W* (* Some frequency ranges do not have FCC certification.)
- 16 memory channels
- 800 mW (typ.) loud audio (internal speaker)

Supplied Accessories

- Battery pack*
- MB-124, belt clip
- Antenna
- Desktop charger*
- AC adapter*

* May differ or not supplied, depending on the transceiver version.
**HARDWORKING MOBILE RADIOS**

**FEATURES**

- DTMF autodial
- MDC 1200 compatible (limited functions)
- External memory channel control, external device connection with optional ACC cable
- 8-character alphanumeric display (IC-F5021/F6021 series only)
- 4 W (typical) front mounted speaker
- 136–174 MHz, 50/25 W versions* (400–470, 450–512 and 450–520 MHz, 25/45 W versions* (Depending on version. Some frequency ranges do not have FCC certification.)
- 128 memory channels with 8 zones (IC-F5021/F6021 series only)
- 8 memory channels and LED lighting (IC-F5011/F6011 series only)

**Supplied Accessories**

- HM-152, hand microphone
- DC power cable
- Mounting bracket kit
- Microphone hanger

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**Data Radios**

**VHF DATA TRANSCEIVER**

**IC-F5122DD** (25 W)

**UHF DATA TRANSCEIVER**

**IC-F6122DD** (25 W)

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**GENERAL PURPOSE TRANSPARENT DATA MODEM**

**FEATURES**

- 9600 bps (at 12.5 kHz) and 4800 bps (at 6.25 kHz) data mode
- 25 W, 10 W and 6 W three-step RF output power
- TCP/IP protocol (IPv4) support for Ethernet

**Supplied Accessories**

- DC power cable
- Mounting bracket kit
Bridge Connection between Radio Systems
The VE-PG4 interconnects with two or more radio systems, even when the systems are using different bands and different categories. All received audio is bridged to opposing radio system. The built-in digital voice converter converts analog audio to IDAS™ compatible digital audio.

Telephone Interconnect
The built-in simplified SIP server can assign extension numbers to IDAS™ radio terminals and IP advanced radio terminals as well as IP phones. A radio user can initiate phone calls. Phone users can make individual or group calls to the connected radio users.

IP Advanced Radio System Gateway
The VE-PG4 interconnects IP100H, IP communication terminals, and IP501H/IP501M, LTE transceivers with conventional radio systems. GPS position data from LTE transceivers can be obtained and transferred to a PC for GPS tracking*.

* GPS mapping software required for GPS data (future).

Multi-site Connection between VE-PG4s
Two or more VE-PG4s can be connected through LAN or LTE (4G) and 3G networks*. The communication area can be flexibly expanded, and dispersed radio sites can be connected, regardless of distance and/or the radio system used.

* Service availability depends on the country. Network coverage provided by a custom SIM card.

FEATURES

• Wireless LAN IP Advanced Radio System controller (Equivalent to the IP1000C function) built-in, capable of controlling up to 50 IP communication terminals
• IDAS™ Conventional and NXDN™ Type-D multi-site trunking connection • IC-SAT100, Satellite PTT transceiver connection* (* Planned feature)
• Base station operation with optional microphone • External equipment, sensor connection • Serial Pass-through function
• Voice recording function to a USB drive* (* User supplied) • Half-width 1U form design • Router functions with VPN tunnel
• Web-based configuration setting • SIP server and IP-PBX functions • SYSLOG and SNMP
• Abnormal condition monitoring such as LAN port link-down and SIP server registration error • Administrator password • Security slot

Supplied Accessories
• Antennas • Antenna bases with 1.5 m (4.9 ft) cable • BC-236, AC adapter* • Quick connectors

* May differ, or not supplied, depending on the version.
**IP ADVANCED RADIO SYSTEM (Wireless LAN)**

**FULL-DUPELEX COMMUNICATION THAT WORKS OVER A WIRELESS IP NETWORK**

- **Controller**: IP1000C*
  - Capable of controlling up to 100 terminals (including IP100FS)
  - The IP1000C controls all terminal configurations and voice traffic
  - Capable of controlling up to 100 terminals (including IP100FS)

  * The IP1000C has a built-in controller function (equivalent to the IP1000C function), capable of controlling up to 50 communication terminals. The figures leave out some equipment, such as a network switch, to simplify the information.

**FEATURES**

**Wireless Communication System**
- By deploying access points along an existing IP network, the IP advanced radio system can communicate from anywhere in the facility. The IP100H can access the nearest access point, and can roam between access points.

**Hands-free, Full-duplex Communication**
- With an optional earphone-microphone or headset, the IP100H user can simultaneously talk and receive like a phone. Hands-free operation allows your staff to carry out other tasks at the same time.
  - For full-duplex operation, please use either HM-153LS, HM-166LS, HS-102 with OPC-2559 or HS-85 with OPC-2144 for full-duplex operation.

**Interconnect between IDAS™ and IP Phone Systems**
- With the VE-PG4 RoIP gateway, the IP advanced radio system can interconnect with an IP phone system, analog transceiver and IDAS™ Type-D multi-site trunking and conventional system.

**IP COMMUNICATION TERMINAL**

**IP100H**
- License-free wireless LAN communication terminal using IEEE 802.11 a/b/g/n standards (2.4 GHz and 5 GHz*)
- WPA-PSK/WPA2-PSK (TKIP/AES) authentication
- IPX7 waterproof (1 m depth water for 30 minutes)
- MIL-STD 810G rugged construction
- Compact 58 × 95 × 26.4 mm body and 205 g (approximate) lightweight
- Vibration alert function notices incoming calls
  - Text message reception and preprogrammed message transmission • Status messages • Emergency call function • Full dot-matrix display

**Supplied Accessories**
- IP-271, battery pack • MB-127, belt clip
- Antenna • Hand strap

**EXTERNAL EQUIPMENT**
- External equipment (Public Address System)

**WIRELESS LAN ACCESS POINT**

**AP-95M**
- IEEE 802.11ac (Wave 2) Standard, High-Speed Communication*
- Beam Forming Function, MU-MIMO Function
- Optional RS-AP3, Access point management software
  - Authorized frequency range and channels may differ, depending on the country.

**REMOTE COMMUNICATOR**

**IP100FS**
- The IP100FS can communicate with IP communication terminals from a PC
- The IP100FS can obtain location information of each IP100H based on using access points, when used with the AP-95M
- Can be installed on a Windows®-based tablet PC as well as laptop PC
- Supplied with USB flash drive for use as a USB hardware key

**CONTROLLER**

**IP1000C**
- IP1000C*  Capable of controlling up to 100 terminals (including IP100FS)
- The IP1000C controls all terminal configurations and voice traffic
- Capable of controlling up to 100 terminals (including IP100FS)

* Authorized frequency range and channels may differ, depending on the country.

**FEATURES**

- Optional RS-AP3, Access point management software
- IEEE 802.11ac (Wave 2) Standard, High-Speed Communication*
- Beam Forming Function, MU-MIMO Function
- Optional RS-AP3, Access point management software
- **IP100FS**
  - The IP100FS can communicate with IP communication terminals from a PC
  - The IP100FS can obtain location information of each IP100H based on using access points, when used with the AP-95M
  - Can be installed on a Windows®-based tablet PC as well as laptop PC
  - Supplied with USB flash drive for use as a USB hardware key

**CONTROLLER**

**IP1000C**
- The IP1000C controls all terminal configurations and voice traffic
- Capable of controlling up to 100 terminals (including IP100FS)
Push-to-Talk Communication over an LTE (4G) and 3G Networks*

The IP501H/IP501M LTE transceiver uses dedicated hardware in a closed network to provide a stable and secure connection. The LTE transceiver does not require its own repeaters or IP network, which reduces the cost of building and maintaining a wide area radio network.

* Service availability depends on the country. Network coverage provided by custom SIM card.

Full-Duplex Communication

The LTE transceiver enables use of full-duplex communication, which provides smooth telephone style conversations. The IP501H/IP501M users can talk and receive at the same time.

Multiple User Communication

Multiple users in call groups can initiate calls instantaneously, removing the need to wait for available channels, to communicate.

Priority Interrupt Calling

The LTE transceiver supports group calls with three or more people. In case of an emergency, you can break into an on-going call to transmit an important message.

Interconnect between IDAS™ and IP100H Systems

With the VE-PG4, RoIP gateway, the LTE transceiver can be connected with IP phones, analog transceivers, IDAS™ digital transceivers and an IP100H wireless LAN IP Advanced Radio System. In addition, GPS position data can be obtained from the LTE transceiver.

* GPS mapping software required for GPS data (future).
IP ADVANCED RADIO SYSTEM (LTE Transceivers)

DIRECT PMR TRANSCEIVER
IP501M

FIXED MOUNT LTE TRANSCEIVER
INTEROPERABLE WITH THE IP501H

- Interoperable with the handheld IP501H
- Solid structure meets IP54 and MIL-STD-810G standards
- Built-in Bluetooth® and GPS
- Optional HM-230HB with providing a handheld-like user interface
- An Ethernet port for data communication
- D-SUB 25-PIN connector with optional OPC-2407 cable

FEATURES
- Text message reception and preprogrammed message transmission
- Up to 500 memories (including group, individual, talk group and telephone)
- Full duplex communication without a headset
- Full dot-matrix display
- Both 12- and 24- volt compatible

Supplied Accessories
- HM-241, speaker-microphone
- Antennas with 3 m, 9.8 ft cable
- GPS antenna
- Mounting bracket
- Microphone hanger
- DC power cable

SPEAKER-PHONE UNIT
VE-SP1
(IP501H purchase separately)

JUST PUT THE IP501H IN THE SLOT
AND START A VOICE CONFERENCE

- Compact body and easy installation
- Built-in loudspeaker and high sensitivity microphone
- Charges the IP501H during voice conference
- Portable operation with LR6 (AA)x8 cells
- Up to two SM-1 external microphones connectable

Supplied Accessories
- OPC-2397, connection cable
- BC-242, AC adapter
- SM-1, external microphone
AH-740, Relay-Driven Compact Type Antenna

- Relay-driven compact automatic tuning antenna
- Compact and lightweight (3.5 kg)
- 150 ms typical high-speed tuning (while memory tuning)
- Low power consumption (0.4 A typical)

Supplied Accessories
- Control cable and coaxial cable

AH-5NV NVIS (Near Vertical Incidence Skywave) Kit

- Fiberglass antenna element (4.5 m; 14.8 ft) for short range communication within approximately 500 km

* For the remote control microphone and detached controller types, an optional separation cable is separately required.

AH-740 Compact type

A PROFESSIONAL HF, ALL IN ONE PACKAGE

FEATURES

- Three types of controller configurations
- 2G ALE (Automatic Link Establishment), MIL-STD-188-141B compatible
- CCIR493-4 based 4-digit and 6-digit open standards Selcall

Supplied Accessories
- HM-192 remote control mic • Mic hanger kit for HM-192
- Extension mic connector • SP-35L external speaker
- DC power cable • Fuse

AH-5NV NVIS (Option for AH-740)

Detached controller type

Supplied accessories
- HM-193 microphone • Remote controller head
- RMK-6 separation kit • Mic hanger kit • SP-35L external speaker
- DC power cable • Fuse

A PROFESSIONAL HF, ALL IN ONE PACKAGE

FEATURES

- RX: 0.5–29.9999 MHz, TX: 1.6–29.9999 MHz • 125 W* PEP output power (* J3E/A1A mode, depending on version) • 100% duty cycle operation (SSB voice TX) • SSB, AM, CW and Data mode* (* Depending on version) • 500 memory channels, 500 selcall and 500 ALE channels • MIL-STD-188-141B and FED- STD-1045A ALE standards; ALE individual call, net call, sounding, AMD (Automatic message display) and LQA (Link Quality Analysis) polling • CCIR493 based 4- and 6-digit open standards and 4- and 6-digit Icom proprietary digital ID system • Selcall, phone call, message call, position call, status call, emergency call, channel test call and stun call • IP54 and MIL-STD-810 durable enclosed structure • BITE (Built-in Test Equipment) function • Optional GPS unit, UX-248, for sending position information and using AVL (Automatic Vehicle Location) system • Administrator and user access feature for user menu access restriction • Clear talk function for digital noise reduction • USB port for PC programming and CI-V remote control • PTT tune function automatically starts tuning when the PTT button is pushed • ±0.3 ppm frequency stability • HF e-mail function with RapidM TC4 HF data modem, software and PC • 2400 bps MELPe Vocoder and 256-bit AES encryption* with RapidM TC4-LP (* The function availability depending on the transceiver version. Not available in the USA version.)

AH-740, Relay-Driven Compact Type Antenna

FEATURES

- Relay-driven compact automatic tuning antenna
- Compact and lightweight (3.5 kg)
- 150 ms typical high-speed tuning (while memory tuning)
- Low power consumption (0.4 A typical)

Supplied Accessories
- Control cable and coaxial cable

AH-5NV NVIS (Near Vertical Incidence Skywave) Kit

- Fiberglass antenna element (4.5 m; 14.8 ft) for short range communication within approximately 500 km

* Depending on radio propagation conditions
## Options for Handheld Radios

### BATTERY PACKS

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</thead>
<tbody>
<tr>
<td>Li-ion</td>
<td>7.4 V/1600 mAh (min.)</td>
<td>2010 mAh (typ.)</td>
<td>2300 mAh (typ.)</td>
<td>3200 mAh (min.)</td>
<td>3040 mAh (typ.)</td>
<td>3000 mAh (min.)</td>
<td>3100 mAh (typ.)</td>
<td>3050 mAh (min.)</td>
<td>3000 mAh (min.)</td>
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### BATTERY CASES

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<tbody>
<tr>
<td>Li-ion</td>
<td>7.4 V/1150 mAh (min.)</td>
<td>1200 mAh (typ.)</td>
<td>1200 mAh (typ.)</td>
<td>1200 mAh (typ.)</td>
<td>1200 mAh (typ.)</td>
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### CHARGERS

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<tr>
<td>Rapid charger</td>
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<tr>
<td>Intelligent charger</td>
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* The battery charger, BC-212EX, BC-219N, BC-225, BC-226, BC-227 or BC-214 must not be used in an explosive atmosphere. The IC-F52D-UL/F62D-UL models should only be used with the specified Internally Safe approved options.

Read all instructions enclosed with the transceiver carefully and completely before using the transceiver.
**Options for Handheld Radios**

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>CHARGERS</th>
<th>READER SOFTWARE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BC-119NS</strong></td>
<td>Rapid charger</td>
<td>AD-110 is supplied with BC-197 (Use with BC-218)</td>
</tr>
<tr>
<td><strong>BC-213</strong></td>
<td>Rapid charger</td>
<td>BC-110 is supplied with BC-197 (Use with BC-218)</td>
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<tr>
<td><strong>BC-160</strong></td>
<td>Rapid charger</td>
<td>BC-218</td>
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<tr>
<td><strong>BC-171</strong></td>
<td>Regular charger</td>
<td><strong>BC-182</strong></td>
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<tr>
<td><strong>IC-F3001, IC-F3003</strong></td>
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<td><strong>IC-F62D-UL</strong>, <strong>IC-F52D-UL</strong>, <strong>IC-F4201DEX</strong>, <strong>IC-F4203DEX</strong></td>
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<td><strong>IC-F3201DEX</strong>, <strong>IC-F3203DEX</strong></td>
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<td><strong>IC-F4210D</strong></td>
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<td><strong>IC-F4230DT/DS</strong></td>
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<tr>
<td><strong>IC-F3230DT/DS</strong>, <strong>IC-F3261DT/DS</strong>, <strong>IC-F3263DT/DS</strong></td>
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<tr>
<td><strong>IC-F1100DT/DS/D</strong></td>
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<tr>
<td><strong>IC-F62D</strong></td>
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<td><strong>IC-F52D</strong></td>
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<td><strong>IC-F4400DT/DS/D</strong></td>
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<td><strong>IC-F3400DT/DS/D</strong></td>
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<tr>
<td><strong>IC-F9021T/S/B</strong></td>
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<tr>
<td><strong>IC-F7040T/S</strong></td>
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<tr>
<td><strong>IC-SAT100</strong></td>
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<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>MULTI-CHARGERS</th>
<th>CHARGER ADAPTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BC-214N</strong></td>
<td>AD-140 is supplied with the BC-214N.</td>
<td>AD-140 (Use with BC-214)</td>
</tr>
<tr>
<td><strong>BC-214</strong></td>
<td>Either AD-130 or AD-132N is supplied with the BC-214.</td>
<td>AD-132N (Use with BC-214)</td>
</tr>
<tr>
<td><strong>BC-121NS</strong></td>
<td>AD-110 is supplied with the BC-121NS.</td>
<td>AD-110 (Use with BC-214)</td>
</tr>
<tr>
<td><strong>BC-197</strong></td>
<td>Either AD-120, AD-121 or AD-122 is supplied with the BC-197.</td>
<td>AD-121 (Use with BC-214)</td>
</tr>
<tr>
<td><strong>BC-211</strong></td>
<td>For BP-300</td>
<td>AD-110 (Use with BC-214)</td>
</tr>
<tr>
<td><strong>AD-140</strong></td>
<td>For BP-300</td>
<td>AD-110 (Use with BC-214)</td>
</tr>
<tr>
<td><strong>AD-132N</strong></td>
<td>For BP-283/284/290/294UL/294</td>
<td>AD-110 (Use with BC-214)</td>
</tr>
<tr>
<td><strong>AD-110</strong></td>
<td>For BP-254</td>
<td>AD-110 (Use with BC-214)</td>
</tr>
<tr>
<td><strong>AD-130</strong></td>
<td>For BP-278/279/280</td>
<td>AD-110 (Use with BC-214)</td>
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<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>CHARGER ADAPTERS</th>
<th>AC ADAPTERS</th>
<th>CHARGER CABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AD-122</strong></td>
<td>For BP-232WP</td>
<td>BC-242</td>
<td>12 V/1 A</td>
</tr>
<tr>
<td><strong>AD-120</strong></td>
<td>For BP-264</td>
<td>BC-242</td>
<td>12 V/1 A</td>
</tr>
<tr>
<td><strong>AD-121</strong></td>
<td>For BP-265</td>
<td>BC-242</td>
<td>12 V/1 A</td>
</tr>
<tr>
<td><strong>BC-123S</strong></td>
<td>12 V/250 mA</td>
<td>BC-157S</td>
<td>12 V/7.5 A</td>
</tr>
<tr>
<td><strong>BC-147S</strong></td>
<td>12 V/7.5 A</td>
<td>BC-228</td>
<td>15 V/4 A</td>
</tr>
<tr>
<td><strong>BC-207S</strong></td>
<td>12 V/7.5 A</td>
<td>BC-207S</td>
<td>12 V/4 2 A</td>
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</table>

*1 BC-123/BC-147SA for the USA plug. SE for European plug. SV for Australian plug.
### Options for Handheld Radios

#### CHARGER CABLES

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>DC POWER CABLES</th>
<th>SPEAKER-MICROPHONES</th>
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</thead>
<tbody>
<tr>
<td>IC-SAT100</td>
<td>OPC-515L</td>
<td>Use with BC-21H/K</td>
</tr>
<tr>
<td>IC-F9010S, IC-F7020T/S, IC-F4201DEX, IC-F4203DEX</td>
<td>OPC-656</td>
<td>Use with BC-21H/K</td>
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<tr>
<td>IC-420D</td>
<td>HM-203EX</td>
<td>Use with BC-21H/K</td>
</tr>
<tr>
<td>IC-F9021T/S</td>
<td>HM-222</td>
<td>Use with BC-21H/K</td>
</tr>
<tr>
<td>IC-F4201DEX, IC-F4203DEX</td>
<td>HM-184/H</td>
<td>Use with BC-21H/K</td>
</tr>
<tr>
<td>IC-F52D</td>
<td>HM-233GP</td>
<td>Use with BC-21H/K</td>
</tr>
<tr>
<td>IC-F62D</td>
<td>HM-168LWP</td>
<td>Use with BC-21H/K</td>
</tr>
<tr>
<td>IC-F52D-UL</td>
<td>Waterproof connector</td>
<td>Use with BC-21H/K</td>
</tr>
<tr>
<td>IP100H</td>
<td>Use with BC-21H/K</td>
<td>Use with BC-21H/K</td>
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<tr>
<td>IP100H</td>
<td>Use with BC-21H/K</td>
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#### EARPHONE-MICROPHONES

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<thead>
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<th>MODEL NAME</th>
<th>TIE-CLIP MICROPHONE</th>
<th>HEADSETS</th>
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<tbody>
<tr>
<td>HM-159LA</td>
<td>Use with VS-4MC</td>
<td>VS-3 Bluetooth® headset</td>
</tr>
<tr>
<td>HM-171GPW</td>
<td>Use with VS-5MC</td>
<td>VS-3 Bluetooth® headset</td>
</tr>
<tr>
<td>HM-171GP</td>
<td>Use with VS-5MC</td>
<td>VS-3 Bluetooth® headset</td>
</tr>
<tr>
<td>HM-183LS</td>
<td>Use with VS-5MC</td>
<td>VS-3 Bluetooth® headset</td>
</tr>
<tr>
<td>HM-186LS</td>
<td>Use with VS-5MC</td>
<td>VS-3 Bluetooth® headset</td>
</tr>
<tr>
<td>HM-215</td>
<td>Use with VS-5MC</td>
<td>VS-3 Bluetooth® headset</td>
</tr>
<tr>
<td>HM-153LA</td>
<td>Use with VS-5MC</td>
<td>VS-3 Bluetooth® headset</td>
</tr>
<tr>
<td>HM-166LA</td>
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<tr>
<td>HM-153LS</td>
<td>Use with VS-5MC</td>
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#### SPEAKER-MICROPHONES

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<tr>
<th>MODEL NAME</th>
<th>WATERPROOF CONNECTOR</th>
<th>EARPHONE-MICROPHONES</th>
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<td>OPC-656</td>
<td>Use with BC-21H/K</td>
<td>Use with BC-21H/K</td>
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<tr>
<td>OPC-515L</td>
<td>Use with BC-21H/K</td>
<td>Use with BC-21H/K</td>
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<tr>
<td>OPC-656</td>
<td>Use with BC-21H/K</td>
<td>Use with BC-21H/K</td>
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<tr>
<td>OPC-515L</td>
<td>Use with BC-21H/K</td>
<td>Use with BC-21H/K</td>
</tr>
</tbody>
</table>

#### NOTE

2 Requires either HM-153LS, HM-166LS or HS-102 with OPC-2359 for full-duplex operation. *3 HS-94, HS-95 and HS-97 headsets are simplex mode operation only.

*4 These options are available with IC-F7040T/S only.
## Options for Handheld Radios

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>PTT SWITCH CABLES</th>
<th>VOX/PTT CASE</th>
<th>PLUG ADAPTER CABLES</th>
<th>EARPHONES</th>
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<tr>
<td>IP100H</td>
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<td>✔</td>
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<tr>
<td>IP501H</td>
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<tr>
<td>IC-F4001, IC-F4003</td>
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<tr>
<td>IC-F2000/T/S</td>
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<td>IC-F4201DEX, IC-F4203DEX</td>
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<td>IC-F3201DEX, IC-F3203DEX</td>
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<tr>
<td>IC-F4210D</td>
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<td>IP100H</td>
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<tr>
<td>IC-F4230DT/DS, IC-F4263DT/DS</td>
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<td>IC-F2100DT/DS/D</td>
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<tr>
<td>IC-F1100DT/DS/D</td>
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<td>IP100H</td>
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<td>IC-F7010T/S, IC-F7020T/S</td>
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<td>✔</td>
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<tr>
<td>IC-SAT100</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>IP100H</td>
</tr>
</tbody>
</table>

### Options for Handheld Radios

- **SP-26**
  - 2.5 mm plug
  - Use with MB-94EX

- **SP-27**
  - 3.5 mm plug
  - Use with MB-94EX

- **SP-28**
  - 2.5 mm plug
  - Use with MB-94EX

- **SP-29**
  - 3.5 mm plug
  - Use with MB-94EX

- **SP-32**
  - Tube earphone adapter
  - Use with MB-94EX

- **SP-40**
  - 3.5 mm plug
  - Use with MB-94EX

- **AD-118**
  - Allows you to use 6-pin Hirose plug accessories

- **AD-135**
  - 3.5 mm jack earphone adapter

### Earphones

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>ACC ADAPTERS</th>
<th>BELT CLIPS</th>
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<tr>
<td>IP501H</td>
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<td>✔</td>
</tr>
<tr>
<td>IP100H</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

### Options for Handheld Radios

- **MB-135**
  - For use with BC-218

- **MBA-7**
  - For use with BC-218

### Carrying Cases

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>BELT CLIPS</th>
<th>BELT HANGERS</th>
<th>CHARGER BRACKET</th>
<th>MOUNT BASE</th>
<th>BRACKET ADAPTER</th>
<th>CARRYING CASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MB-130</td>
<td>MB-135</td>
<td>MB-96N</td>
<td>MB-96FL</td>
<td>MB-130</td>
<td>MB-135</td>
<td>LC-191S</td>
</tr>
</tbody>
</table>

* These options are available with IC-F7040/T5S only. *5 Charging is possible while the case is attached.
<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>LC-184&lt;sup&gt;430&lt;/sup&gt;</th>
<th>LC-186&lt;sup&gt;430&lt;/sup&gt;</th>
<th>LC-187&lt;sup&gt;430&lt;/sup&gt;</th>
<th>LC-188</th>
<th>LC-183&lt;sup&gt;430&lt;/sup&gt;</th>
<th>LC-185&lt;sup&gt;430&lt;/sup&gt;</th>
<th>OPC-1870</th>
<th>OPC-2362</th>
<th>OPC-2338</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For use with BP-220</td>
<td>For use with BP-220</td>
<td>For use with BP-299</td>
<td></td>
<td>For use with BP-271</td>
<td>For use with BP-272</td>
<td>Handheld to handheld</td>
<td>Handheld to mobile</td>
<td>Programming cable</td>
</tr>
<tr>
<td>CARRYING CASES</td>
<td>![Image](Image116x637 to 148x704)</td>
<td>![Image](Image129x406 to 181x453)</td>
<td>![Image](Image187x402 to 247x451)</td>
<td>![Image](Image223x166 to 278x171)</td>
<td>![Image](Image242x644 to 265x714)</td>
<td>![Image](Image253x400 to 320x448)</td>
<td>![Image](Image366x406 to 478x457)</td>
<td>![Image](Image528x406 to 580x451)</td>
<td><img src="Image584x18" alt="Image" /></td>
</tr>
<tr>
<td>ZONE COPY CABLES</td>
<td><img src="Image280x29" alt="Image" /></td>
<td><img src="Image341x303" alt="Image" /></td>
<td><img src="Image385x29" alt="Image" /></td>
<td><img src="Image388x444" alt="Image" /></td>
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<td><img src="Image480x640" alt="Image" /></td>
<td><img src="Image532x696" alt="Image" /></td>
<td><img src="Image584x18" alt="Image" /></td>
</tr>
</tbody>
</table>

<sup>430</sup> LC-184 for use with BP-220, LC-190<sup>430</sup> for use with BP-299

Some options may not be available in some countries. Please ask your dealer for details.

---

**Options for Handheld Radios**

**ANTENNAS**

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>FA-S81V</th>
<th>136–150 MHz</th>
<th>FA-S83V</th>
<th>148–162 MHz</th>
<th>FA-S81U</th>
<th>380–430 MHz</th>
<th>FA-S83U</th>
<th>470–520 MHz</th>
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<td><strong>IC-SAT100</strong></td>
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<td><strong>IC-F300DT/DS, IC-F300DT/ED</strong></td>
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**CUT ANTENNAS**

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>FA-561UC</th>
<th>136–174 MHz</th>
<th>FA-576UC</th>
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</table>

Some options may not be available in some countries. Please ask your dealer for details.

---

*Changing is possible while the case is attached. *5 LC-184 for use with IC-F3400DT/DS, F4400DT/DS. LC-186 for use with IC-F3400D, F4400D.治愈一些国家可能没有可使用。请向你的经销商查询。

---

![Image](Image584x18)
## Options for Mobile Radios and Repeaters

### HAND MICROPHONES

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>HM-220</th>
<th>HM-220T</th>
<th>HM-221</th>
<th>HM-221T</th>
<th>HM-211</th>
<th>HM-152</th>
<th>HM-152T</th>
<th>HM-148G</th>
<th>HM-148T</th>
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<tbody>
<tr>
<td></td>
<td>Heavy-duty type</td>
<td>Heavy-duty type with U1M keypad</td>
<td>DTMF keypad type</td>
<td>Active Noise Cancelling</td>
<td>DTMF keypad type</td>
<td>Heavy-duty type</td>
<td>Heavy-duty type with DTMF keypad</td>
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### SEPARATION KITS COMMANDMIC™ SEPARATION CABLES GPS ANTENNA ACC CABLES

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*No digital modulation “R” using accessory cables.*
## Options for Mobile Radios and Repeaters

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<td>OPC-2362 Mobile to handheld</td>
<td>OPC-1871 Mobile to handheld OPC-1532 Mobile to mobile</td>
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- Some options may not be available in some countries. Please ask your dealer for details.

## Options for Repeaters

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<th>TRUNKING/NETWORK CONTROLLER</th>
<th>IDAS™ SOFTWARE</th>
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<td>✔</td>
<td>UR-FR5000 136–174 MHz, 50 W</td>
<td>UR-PA5000 136–174 MHz, 100 W 50% duty, 50 W 100% duty</td>
<td>OPC-2202 For connection with UR-PA5000/ PA6000</td>
<td>UC-FR5000</td>
<td>CF-FR5000MC Multi-site conventional software for UC-FR5000</td>
</tr>
<tr>
<td>✔</td>
<td>UR-FR6000 400–470, 450–520 MHz, 50 W</td>
<td>UR-PA6000 400–470, 450–520 MHz, 50 W 50% duty, 50 W 100% duty</td>
<td>OPC-2202</td>
<td>UC-FR5000</td>
<td>CF-FR5000MT NXDN™ Type-D Multi-site trunking software for UC-FR5000</td>
</tr>
<tr>
<td>✔</td>
<td>UR-PA5000 136–174 MHz, 100 W 50% duty, 50 W 100% duty</td>
<td>UR-PA6000 400–470, 450–520 MHz, 50 W 50% duty, 50 W 100% duty</td>
<td>OPC-2202</td>
<td>UC-FR5000</td>
<td>CF-FR5000MT NXDN™ Type-D Multi-site trunking software for UC-FR5000</td>
</tr>
<tr>
<td>✔</td>
<td>OPC-2202</td>
<td>UC-FR5000</td>
<td>CF-FR5000MC Multi-site conventional software for UC-FR5000</td>
<td>CF-FR5000MT NXDN™ Type-D Multi-site trunking software for UC-FR5000</td>
<td></td>
</tr>
</tbody>
</table>

- Some options may not be available in some countries. Please ask your dealer for details. *1 Not available in some countries. (Not available in the USA.)

## Options for Handheld and Mobile Radios

### LICENSE KEYS

**LICENSE KEYS**

<table>
<thead>
<tr>
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</table>

- Some options may not be available in some countries. Please ask your dealer for details.
## Options for RoIP and IP Advanced Radio Systems

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>AC ADAPTERS</th>
<th>AUDIO CONNECTION CABLES</th>
<th>SPEAKER/MICROPHONE</th>
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<tbody>
<tr>
<td>BC-236</td>
<td>BC-2075</td>
<td>OPC-2273</td>
<td>VE-PG4</td>
</tr>
<tr>
<td>12 V/8.3 A</td>
<td>12 V/4.2 A</td>
<td>For VHF marine transceiver 5 m; 16.4 ft</td>
<td>✔</td>
</tr>
<tr>
<td>BC-147S</td>
<td>BC-2075</td>
<td>OPC-2390</td>
<td>VE-PG4</td>
</tr>
<tr>
<td>12 V/2.25 A</td>
<td>12 V/4.2 A</td>
<td>For IC-FR5000/FRS200H series 5 m; 16.4 ft</td>
<td>✔</td>
</tr>
<tr>
<td>OPC-2275</td>
<td>OPC-2390</td>
<td>OPC-2275</td>
<td>VE-PG4</td>
</tr>
<tr>
<td>For mobile transceiver 5 m; 16.4 ft</td>
<td>For HM-152 or SM-26 5 m; 16.4 ft</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>OPC-2276</td>
<td>OPC-2276</td>
<td>OPC-2389</td>
<td>VE-PG4</td>
</tr>
<tr>
<td>For HM-152 or SM-26 5 m; 16.4 ft</td>
<td>For RS-252 serial connection 5 m; 16.4 ft</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>OPC-2389</td>
<td>HM-241</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**1** BC-147SA for the USA plug. SE for European plug. SV for Australian plug.

**2** The HM-152, HM-152T, HM-216 and SM-26 has no Speaker function. An external speaker is required to be connected to the VE-PG4 to hear received audio with these options.

**3** The HM-216 has a total of 490 mm cable length including a 300 mm curl code, while the HM-152 has a total of 900 mm cable length.

### HAND MICROPHONES

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>HAND MICROPHONES</th>
<th>DESKTOP MICROPHONE</th>
<th>DIGITAL VOICE CONVERTER</th>
<th>MICROPHONE ADAPTER</th>
<th>ACCESS POINT MANAGER</th>
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<tbody>
<tr>
<td>HM-152</td>
<td>VE-PG4</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>HM-152T</td>
<td>AP-95M</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>HM-216</td>
<td>IP100FS</td>
<td>✔</td>
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<tr>
<td>HM-216</td>
<td>RC-FS10</td>
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</table>

**1** Use with CT-23 and BC-147S

**2** Use with CT-23 and BC-147S

### OPTIONS FOR HF RADIOS

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>HAND MICROPHONE</th>
<th>REMOTE CONTROL</th>
<th>SEPARATION KIT</th>
<th>SEPARATION CABLES</th>
<th>AUTOMATIC ANTENNA</th>
<th>NVIS KIT</th>
<th>EXTERNAL SPEAKERS</th>
<th>GPS UNIT</th>
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<tbody>
<tr>
<td>HM-193</td>
<td>IC-F8101</td>
<td>✔</td>
<td>✔</td>
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<td></td>
<td></td>
<td>SP-30</td>
<td>UX-248</td>
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<tr>
<td>HM-192</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>SP-35</td>
<td></td>
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</table>

**3** Use with CT-23, BC-147S

### OPTIONS FOR THIRD PARTY PRODUCTS

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>OPC-2308</th>
<th>AF-140</th>
<th>AH-2b</th>
<th>OPC-2309</th>
<th>MB-126</th>
<th>CPU-F8100</th>
<th>SCS PACTOR III</th>
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<tbody>
<tr>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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</table>

Some options may not be available in some countries. Please ask your dealer for details.
# Specifications for P25 Digital Radios and Repeaters

<table>
<thead>
<tr>
<th>IC-F7010T/S</th>
<th>IC-F7020T/S</th>
<th>IC-F9011T/S/B</th>
<th>IC-F9021T/S/B</th>
<th>IC-F9101T</th>
<th>IC-F9111S/B</th>
<th>IC-F9101S/B</th>
<th>IC-F9010T</th>
<th>IC-F9020T</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency coverage</strong>&lt;br&gt; (Varies according to version)</td>
<td>136–174 MHz</td>
<td>380–470 MHz</td>
<td>450–512 MHz</td>
<td>450–520 MHz</td>
<td>136–174 MHz</td>
<td>380–470 MHz</td>
<td>450–512 MHz</td>
<td>450–520 MHz</td>
</tr>
<tr>
<td><strong>Number of channels (Max.)</strong></td>
<td>1024 channels/128 zones</td>
<td>512 channels/128 zones</td>
<td>1024 channels/128 zones</td>
<td>512 channels/128 zones</td>
<td>1024 channels/128 zones</td>
<td>512 channels/128 zones</td>
<td>128 zones</td>
<td>500 channels</td>
</tr>
<tr>
<td><strong>Type of emission</strong>&lt;br&gt; (Varies according to version)</td>
<td>16K0F3E, 14K0F3E, 11K0F3E, 8K50F3E, 8K10F1E, 1K10F1D</td>
<td>16K0F3E, 14K0F3E, 11K0F3E, 8K50F3E, 8K10F1E, 1K10F1D</td>
<td>16K0F3E, 14K0F3E, 11K0F3E, 8K10F1E, 1K10F1D</td>
<td>16K0F3E, 11K0F3E, 8K10F1E, 1K10F1D</td>
<td>16K0F3E, 11K0F3E, 8K10F1E, 1K10F1D</td>
<td>16K0F3E, 11K0F3E, 8K10F1E, 1K10F1D</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Channel spacing</strong>&lt;br&gt; (Varies according to version)</td>
<td>12.5/25 kHz (VHF/UHF) 12.5/25 kHz (700/800 MHz) 12.5/25 kHz 15/30 kHz 12.5/25 kHz 15/30 kHz 12.5/15/30 kHz 15/30 kHz 12.5/20/25/30 kHz</td>
<td>12.5/25 kHz (VHF/UHF) 12.5/25 kHz (700/800 MHz) 12.5/25 kHz 15/30 kHz 12.5/15/30 kHz 15/30 kHz 12.5/20/25/30 kHz</td>
<td>12.5/25 kHz (VHF/UHF) 12.5/25 kHz (700/800 MHz) 12.5/25 kHz 15/30 kHz 12.5/15/30 kHz 15/30 kHz 12.5/20/25/30 kHz</td>
<td>12.5/25 kHz (VHF/UHF) 12.5/25 kHz (700/800 MHz) 12.5/25 kHz 15/30 kHz 12.5/15/30 kHz 15/30 kHz 12.5/20/25/30 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions (W/HxD); Projections not included</strong></td>
<td>53.6 x 123.5 x 38.2 mm; 2.1 x 4.9 x 1.5 in (With BP-254)</td>
<td>58.6 x 167 x 41.8 mm; 2.3 x 6.6 x 1.6 in (With BP-254)</td>
<td>53.6 x 167 x 41.8 mm; 2.1 x 6.6 x 1.6 in (With BP-254)</td>
<td>174 x 55 x 150 mm; 6.9 x 2.2 x 5.9 in (With BP-254)</td>
<td>174 x 55 x 150 mm; 6.9 x 2.2 x 5.9 in (With BP-254)</td>
<td>174 x 55 x 150 mm; 6.9 x 2.2 x 5.9 in (With BP-254)</td>
<td>482 x 88 x 413 mm; 19.0 x 3.5 x 16.3 in</td>
<td></td>
</tr>
<tr>
<td><strong>Weight (approx.)</strong></td>
<td>355 g; 12.5 oz (VHF/UHF)</td>
<td>353 g; 1.2 lb (With BP-254)</td>
<td>1500 g; 3.3 lb</td>
<td>7 kg; 10.4 lb (With controller and cable)</td>
<td>1.5 kg; 3.3 lb</td>
<td>11 kg; 24.3 lb</td>
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<td></td>
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<tr>
<td><strong>RF output power</strong></td>
<td>VHF</td>
<td>5 W</td>
<td>5 W</td>
<td>5 W</td>
<td>5 W</td>
<td>5 W</td>
<td>5 W</td>
<td>5 W</td>
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<tr>
<td></td>
<td>UHF</td>
<td>6 W</td>
<td>6 W</td>
<td>6 W</td>
<td>6 W</td>
<td>6 W</td>
<td>6 W</td>
<td>6 W</td>
</tr>
<tr>
<td><strong>Sensitivity</strong></td>
<td>(at 12 dB SINAD)</td>
<td>0.22 μV typ.</td>
<td>0.23 μV typ.</td>
<td>0.24 μV typ.</td>
<td>0.25 μV typ.</td>
<td>0.25 μV typ.</td>
<td>0.25 μV typ.</td>
<td>0.30 μV typ.</td>
</tr>
<tr>
<td></td>
<td>(at 5% BER)</td>
<td>0.25 μV typ.</td>
<td>0.25 μV typ.</td>
<td>0.25 μV typ.</td>
<td>0.25 μV typ.</td>
<td>0.25 μV typ.</td>
<td>0.25 μV typ.</td>
<td>0.30 μV typ.</td>
</tr>
<tr>
<td><strong>Intermodulation rejection</strong></td>
<td>Analog</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
<td>75/75 dB Typ.</td>
</tr>
<tr>
<td><strong>AF output power</strong></td>
<td>Internal SP</td>
<td>1300 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
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<tr>
<td></td>
<td>External SP</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
<td>1000 mW Typ. (8 Q)</td>
</tr>
</tbody>
</table>

* ISL-P25W is required for 25 kHz bandwidth operation for USA versions.

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**IC-F7010T/S**<br><br>IC-F7020T/S<br>IC-F9011T/S/B<br>IC-F9021T/S/B<br>IC-F9101T<br>IC-F9111S/B<br>IC-F9101S/B<br>IC-F9010T<br>IC-F9020T
<table>
<thead>
<tr>
<th>Specifications for IDAS™ Handheld Radios</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>IC-F3400DT/DSD/0</th>
<th>IC-F5200/LDU</th>
<th>IC-F11000/DSD/0</th>
<th>IC-F3210D/DSD/0</th>
<th>IC-F3200DT/DSD/0</th>
<th>IC-F3210D/DSD/0</th>
<th>IC-F3200DT/DSD/0</th>
<th>IC-F522D-UL</th>
</tr>
</thead>
</table>
| **Frequency coverage**
| **(Varies according to version)** | **(Varies according to version)** | **(Varies according to version)** | **(Varies according to version)** | **(Varies according to version)** | **(Varies according to version)** | **(Varies according to version)** | **(Varies according to version)** |
| **Number of channels (Max.)**
| 1024/4000** | 128 zones | 1024/4000** | 128 zones | 1024/4000** | 128 zones | 1024/4000** | 128 zones |
| **Type of emission**
| 16K0F3E**, 14K0F3E, 11K0F3E, 8K0F3E, 8K0F3E1/E/D, 4K0F3E1/E/D | 16K0F3E**, 14K0F3E, 11K0F3E, 8K0F3E, 8K0F3E1/E/D, 4K0F3E1/E/D | 16K0F3E**, 11K0F3E, 8K0F3E, 4K0F3E1/E/D | 16K0F3E**, 11K0F3E, 8K0F3E, 4K0F3E1/E/D | 16K0F3E**, 8K0F3E, 4K0F3E1/E/D | 16K0F3E**, 8K0F3E, 4K0F3E1/E/D | 16K0F3E**, 8K0F3E, 4K0F3E1/E/D |
| **Channel spacing (Unit kHz)**
| **Dimensions (projections not included; WxHxD)**
| 53.6 x 123.5 x 23.3 mm | 2.1 x 4.9 x 1.1 in | 56 x 91.5 x 29 mm | 2.2 x 3.6 x 1.1 in (With BP-290) |
| **Weight (approximate)**
| 305 g; 10.8 oz (VHF) | 300 g; 10.6 oz (UHF) | 230 g; 8.1 oz (With BP-290 & MB-133 & ant.) | 258 g; 9.1 oz (D) |
| **RF output power**
| VHF: 5 W | UHF: 5 W |
| **Sensitivity**
| (at 12 dB SINAD) 0.22 μV typ. (VHF) | 0.23 μV typ. | 0.24 μV typ. | 0.23 μV typ. | 0.23 μV typ. (VHF) | 0.24 μV typ. (UHF) | 0.23 μV typ. | 0.24 μV typ. (VHF) |
| **Intermodulation rejection**
| Analog (VHF) 75/74 dB typ. | 76/74 dB typ. | 75/77 dB typ. | 75/76 dB typ. |
| Digital (VHF) 72/73 dBV emf typ. | 73/72 dBV emf typ. | 71/70 dBV emf typ. | 68/66 dBV emf typ. |
| **AF output power**
| External IP-900 mW typ. (8 Ω) | 400 mW typ. (8 Ω) | 1000 mW typ. (8 Ω) | 400 mW typ. (8 Ω) |

**Notes:**
- Some frequency ranges (350–400, 360–400, 450–520 MHz versions) do not have FCC certification.
- Optional license key (ISL-CHEX) required.
- Up to 32 selected channels out of 1024 can be allocated to the channel knob.
- At 1% BER (Digital 6.25 kHz).
### Specifications for IDAS™ Mobile Radios and Repeaters

<table>
<thead>
<tr>
<th>Feature</th>
<th>IC-F5001D</th>
<th>IC-F501D</th>
<th>IC-F5021D</th>
<th>IC-F5022D</th>
<th>IC-F5121D</th>
<th>IC-F5122D</th>
<th>IC-F5200H</th>
<th>IC-F5202H</th>
<th>IC-F5600H</th>
<th>IC-F5600D</th>
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<tbody>
<tr>
<td><strong>Frequency coverage</strong></td>
<td></td>
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<td>(Varies according to version)</td>
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<td>136–174 MHz</td>
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<td>380–470 MHz</td>
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<td>450–512 MHz</td>
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<tr>
<td><strong>Number of channels (Max.)</strong></td>
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<tr>
<td>128 channels/99 Channels (DS)</td>
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<tr>
<td><strong>Type of emission</strong></td>
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<tr>
<td>18K0F3E*, 11K0F3E, 8K50F3E, 4K0F1E/D, 4K0F1E/D</td>
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<tr>
<td><strong>Channel spacing</strong></td>
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<tr>
<td>12.5/15/25 kHz</td>
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</tr>
<tr>
<td><strong>Dimensions (projections not included: WxHxD)</strong></td>
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<tr>
<td>(Max.) 174 × 55 × 150 mm</td>
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<tr>
<td><strong>Weight (approx.)</strong></td>
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<td>1.5 kg, 3.3 lb</td>
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<tr>
<td>VHF</td>
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*Some frequency ranges (350–400, 450–520 MHz versions) do not have FCC certification.

*Optional license key (ISL-CHEX) required. *Due to the segment display, channel indication is possible for up to 99 selected channels out of 1024.

*At 1% BER (Digital 6.25 kHz).
## Specifications for Analog and Data Radios

<table>
<thead>
<tr>
<th>Frequency coverage (Varies according to version)</th>
<th>IC-F1000/T/S</th>
<th>IC-F2000/T/S</th>
<th>IC-F3001</th>
<th>IC-F3003</th>
<th>IC-F4001</th>
<th>IC-F4003</th>
<th>IC-F5021</th>
<th>IC-F5023/H</th>
<th>IC-F6021</th>
<th>IC-F6023/H</th>
<th>IC-F5011</th>
<th>IC-F5013/H</th>
<th>IC-F6011</th>
<th>IC-F6023/H</th>
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<td>335–380 MHz (IC-F2000)</td>
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<tr>
<td>Number of channels (Max.)</td>
<td>IC-F1000/T/S: 128 ch</td>
<td>F2000/T/S: 16 ch</td>
<td>16 channels</td>
<td>128 channels</td>
<td>8 channels</td>
<td>128 channels</td>
<td>8 channels</td>
<td>128 channels</td>
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<td>Type of emission (Varies according to version)</td>
<td>16K0F3E*, 11K0F3E</td>
<td>16K0F3E*, 11K0F3E</td>
<td>16K0F3E*, 11K0F3E</td>
<td>16K0F3E*, 11K0F3E</td>
<td>16K0F3E*, 11K0F3E</td>
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<td>8K30F1D, 4K00F1D</td>
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<td>Channel spacing (Varies according to version)</td>
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<td>12.5/25 kHz</td>
<td>12.5/25 kHz</td>
<td>12.5/25 kHz</td>
<td>12.5/25 kHz</td>
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<td>12.5/25 kHz</td>
<td>15/30 kHz</td>
<td>15/30 kHz</td>
<td>6.25/12.5 kHz</td>
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<tr>
<td>Dimensions (projections not included) W×H×D</td>
<td>52.2 × 111.8 × 24.5 mm; 2.1 × 4.4 × 1.0 in (With BP-279)</td>
<td>58 × 111 × 35.5 mm 2.3 × 4.4 × 1.4 in (With BP-265)</td>
<td>150 × 40 × 167.5 mm 5.9 × 1.6 × 6.6 in (50/45 W)</td>
<td>150 × 40 × 117.5 mm 5.9 × 1.6 × 4.6 in (25 W)</td>
<td>150 × 40 × 134.7 mm 5.9 × 1.6 × 5.3 in</td>
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<tr>
<td>Weight (approx.)</td>
<td>240 g; 8.5 oz (With BP-279)</td>
<td>270 g; 9.5 oz (With BP-265)</td>
<td>1.1 kg; 2.4 lb (50/45 W)</td>
<td>0.8 kg; 1.8 lb (25 W)</td>
<td>1.1 kg; 2.4 lb (25 W)</td>
<td>0.8 kg; 1.8 lb (25 W)</td>
<td>0.9 kg; 2.0 lb</td>
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<tr>
<td>RF output power</td>
<td>VHF</td>
<td>5 W</td>
<td>5 W</td>
<td>50 W (F5021, F5023)</td>
<td>50 W (F5021, F5023)</td>
<td>50 W (F5021, F5023)</td>
<td>25 W (F5023)</td>
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<td>Sensitivity (at 12 dB SINAD)</td>
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<td>0.25 μV typ.</td>
<td>0.25 μV typ.</td>
<td>0.25 μV typ.</td>
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<td>0.32/0.28 μV typ. (D 12.5/6.25)</td>
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<td>74 dB typ.</td>
<td>75 dB typ.</td>
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<td>68/66 dB typ. (D 12.5/6.25)</td>
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<td>External SP</td>
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* Some frequency ranges (335–380, 350–400, 450–520 MHz versions) do not have FCC certification.

### Specifications for Analog and Data Radios

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<th>CTCSS/DTCS</th>
<th>IC-F1000/T/S</th>
<th>IC-F2000/T/S</th>
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</tr>
<tr>
<td>Motion detection function</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<td>✔</td>
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<tr>
<td>Channel announcement</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<td>✔</td>
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<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Operating time (approx.)</td>
<td>20 hours with BP-280</td>
<td>14 hours with BP-279</td>
<td>10 hours with BP-278</td>
<td>14 hours with BP-264</td>
<td>20 hours with BP-265</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>IP Rating</td>
<td>IP67</td>
<td>IP54</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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</tr>
</tbody>
</table>

* Limited functions only. (PTT ID, emergency (TX/RX), radio check (RX), stun/revive (RX), transmit status messages only). ** Limited functions only. (PTT ID and emergency only).
### Specifications for RoIP and IP Advanced Radio Systems

<table>
<thead>
<tr>
<th>VE-PG4</th>
<th>IP1000C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power supply</strong></td>
<td>12 V DC ±10%, 4 A maximum (with the supplied AC adaptor)</td>
</tr>
<tr>
<td><strong>Dimensions (W × H × D; projections not included)</strong></td>
<td>213 × 36.8 × 270 mm; 8.4 × 1.4 × 10.6 in (Approximate)</td>
</tr>
<tr>
<td><strong>Weight (approx.)</strong></td>
<td>1.8 kg; 4 lb (Main unit, approximate)</td>
</tr>
<tr>
<td><strong>Regulatory compliance</strong></td>
<td>FCC Part 15 Class B/ ICES003, Part22, Part24, Part27, EN301 489-1, EN301 489-19, EN301 489-52, EN301 908-1, EN301 908-2, EN301 908-13, EN303 413, EN62479, EN62311, EN62368-1</td>
</tr>
<tr>
<td><strong>LAN/WAN</strong></td>
<td>(RJ-45 type) × 1 (Auto MDI/MDI-X) 10BASE-T/100BASE-TX/1000BASE-T</td>
</tr>
<tr>
<td><strong>LAN</strong></td>
<td>(RJ-45 type) × 1 (Auto MDI/MDI-X) 10BASE-T/100BASE-TX/1000BASE-T</td>
</tr>
<tr>
<td><strong>USB</strong></td>
<td>Host interface: USB 3.0 Standard A receptacles ×3</td>
</tr>
<tr>
<td><strong>Audio input</strong></td>
<td>–10 dBs/–40 dBs selectable</td>
</tr>
<tr>
<td><strong>Audio output</strong></td>
<td>0 dBs/–20 dBs selectable 600 Ω load unbalance/8 Ω 1 W speaker</td>
</tr>
<tr>
<td><strong>Control input</strong></td>
<td>Low voltage contacts (3.3 V DC/1 mA) Voltage input (3–16 V)</td>
</tr>
<tr>
<td><strong>Control output</strong></td>
<td>No voltage contacts (30 V/500 mA) Open collector (3–16 V 10 mA)</td>
</tr>
<tr>
<td><strong>Internet protocol</strong></td>
<td>IPv4</td>
</tr>
<tr>
<td><strong>Codec</strong></td>
<td>G.711 μ-law, AMBE+2™</td>
</tr>
</tbody>
</table>

*Service availability depends on the country. Network coverage provided by a custom SIM card.*

### Rear Panel View (VE-PG4)

- **External equipment or radio connectors × 4**
- **USB port × 2**
- **WAN/LAN**
- **Ground terminal**
- **LTE3G antenna connectors**

### Rear Panel View (IP1000C)

- **Console (RS-232)**
- **LAN**
- **Initialization**
- **GND**
- **DC input (12 V)**

### IP100H

| **Wireless standards** | IEEE 802.11 a/b/g/n |
| **Frequency range** | 2.412–2.472 GHz, 5.18–5.24, 5.745–5.825 GHz |
| **Dimensions (W × H × D; projections not included)** | 58 × 95 × 26.4 mm; 2.3 × 3.7 × 1.0 in (with BP-271) |
| **Weight (approx.)** | 205 g; 7.2 oz (with BP-271 and antenna) |
| **RF output power** | Less than 10 mW/MHz |
| **Voice codec** | G.711 μ-law (64 kbps) |
| **AF output power** | Internal SP: 400 mW (typ., 16 Ω at 10% distortion) External SP: |

*Authorized frequency range and channels may differ, depending on country.*
Specifications for HF Radios and Automatic Tuning Antenna

<table>
<thead>
<tr>
<th>IC-F8101</th>
<th>AH-740</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Network</strong></td>
<td><strong>Network</strong></td>
</tr>
<tr>
<td>4G bands:</td>
<td>LTE B1, B3, B7, B8, B20 (EXP)</td>
</tr>
<tr>
<td>3G bands:</td>
<td>W-CDMA B1, B8 (EXP)</td>
</tr>
<tr>
<td><strong>Dimensions (W × H × D; projections not included)</strong></td>
<td>59 × 95 × 32 mm; 2.3 × 3.7 × 1.3 in (with BP-272)</td>
</tr>
<tr>
<td><strong>Weight (approx.)</strong></td>
<td>240 g; 8.5 oz (with BP-272 and antenna)</td>
</tr>
<tr>
<td><strong>Voice Codec</strong></td>
<td>G.726 (32 kbps)</td>
</tr>
<tr>
<td><strong>AF output power</strong></td>
<td>Internal SP</td>
</tr>
<tr>
<td></td>
<td>External SP</td>
</tr>
<tr>
<td><strong>Operating time</strong></td>
<td>More than 17 hours (with BP-272)</td>
</tr>
<tr>
<td><strong>Bluetooth</strong></td>
<td>Ver 2.1 +EDR</td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>Built-in</td>
</tr>
<tr>
<td><strong>LAN</strong></td>
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</table>

Specifications for IP Advanced Radio Systems

<table>
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<th>IP501H (Handheld radio)</th>
<th>IP501M (Mobile radio)</th>
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</thead>
<tbody>
<tr>
<td><strong>Network</strong></td>
<td><strong>Network</strong></td>
</tr>
<tr>
<td>4G bands:</td>
<td>LTE B1, B3, B7, B8, B20 (EXP)</td>
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<tr>
<td>5G bands:</td>
<td>W-CDMA B1, B8 (EXP)</td>
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<tr>
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</table>

All stated specifications are subject to change without notice or obligation. Read all instructions enclosed with the transceiver carefully and completely before using the transceiver.

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Icom Inc.
1-13, Kimihinami, Hiranouku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 www.icom.co.jp/world

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