



# **Professional Radios**





# A COMPREHENSIVE RANGE OF PROFESSIONAL RADIO SOLUTIONS THAT FLEXIBLY MEET YOUR NEEDS

No matter what your communication needs may be, we have the system for you. We go beyond traditional VHF and UHF two-way radios providing peace of mind and keep you connected anywhere and at anytime. Icom continues developing innovative solutions in response to diversifying user needs and can now offer a wide range of two-way radio platforms from analog, digital, wireless LAN, LTE to satellite as a true comprehensive wireless communications company.





### IP Radio – LTE & Hybrid

Icom's IP radio (LTE) provides instantaneous, wide area communication using an LTE (4G) and 3G network<sup>\*</sup>. It enables full-duplex communication, which allows telephone style conversations. The Hybrid IP radio can receive both communications from an LTE radio group and IDAS<sup>™</sup> (or analog) group. <sup>\*</sup> 3G service availability depends on the network operator. Network coverage provided by a custom SIM card.

### Satellite PTT I

Satellite PTT (Push-To-Talk) is a two-way radio system that uses the Iridium<sup>®</sup> satellite network. It can be used as a communication tool in remote, isolated areas where there are no mobile phones or landline network infrastructure. Even if terrestrial network infrastructure is rendered unusable by human or natural disasters, Satellite PTT can provide a stable back-up, independent from other networks.



### P25 Radio

Icom P25 radios meet public safety customers' demanding needs and afford them the opportunity to make the most of their budgets, with cost-effective digital two-way radio communications products. Communicating with Icom's P25 radios using conventional analog, digital, or mixed mode operation as well as optional Phase 1 and Phase 2 trunking allows customers the ability to upgrade their fleet at their own pace.



### Digital Radio

IDAS<sup>™</sup> is Icom's digital land mobile radio system using the NXDN<sup>™</sup> or dPMR<sup>™</sup> common air interface. IDAS<sup>™</sup> offers a complete system of handheld radios, mobile radios, repeaters, network interface/trunking controllers, remote communicator, system manager software and various accessories. IDAS<sup>™</sup> is a proven total digital solution that system owners or operators can grow into as their time and budgets allow.



### Analog Radio

Radio technologies and know-how cultivated for over 60 years have been applied to professional analog radio products. Rugged, waterproof, easy to use, clear and powerful audio in a compact design, lcom's analog products provide high performance and reliable communication. They are cost effective solutions that you can rely on and help you improve productivity and efficiency.



### **RoIP Gateway**

The VE-PG4 is a versatile Radio over IP Gateway device that provides a seamless solution interconnecting various communication systems irrespective of standards and distance such as satellite PTT radio, LTE radio, WLAN radio, IDAS<sup>™</sup> digital radio, analog radio, IP phones and more. The VE-PG4 works as a general IP backbone converting received audio to transmit from other radios.



### IP Radio – WLAN

Wireless LAN radio requires no licence to use and allows you to have simultaneous full-duplex communications over a WLAN network. It offers secure communications with encryption and different types of calls such as individual, all, area, priority, group, status calls and short data messaging. You can also connect an IP phone or conventional radio equipment when using it with the RoIP gateway.

# **IP Radios – Hybrid**

Lister

Simultaneous

Check the Icom website

for more information.

ĩсом

51 2

m

r:

Icom IP740D

FUN

CLR

Talkgroup 1 Address | Functi



### Innovative IP Radios (LTE) with Licensed Professional Radio Mode

The hybrid IP radio, IP730D and IP740D can receive both communications from an IP radio group and IDAS<sup>™</sup> (or analog) group. This radio provides nationwide coverage over LTE networks and conventional VHF/UHF professional radio mode (IDAS<sup>™</sup> digital/analog mode).



#### Hybrid Handheld IP Radio for Local & Nationwide Communications

• Simultaneous TalkListen<sup>™</sup> in LTE Mode • 1500 mW of powerful audio<sup>\*1</sup> • IP67 waterproofing and dust-tight • 24 hours of long lasting battery life<sup>\*2</sup> • Emergency Call, Lone Worker and Man Down functions • Digital Voice Recording/Playback • Vibration alert function • Built-in Bluetooth<sup>®</sup> capability depending on version • GPS Data Transmission capability in LTE mode

AquaQuake<sup>™</sup> function (Also see page 11 for IDAS<sup>™</sup> features)

\*1 At 10% audio distortion

\*2 LTE Mode, TX : RX : standby = 5 : 5 : 90. The battery life may be shorter, depending on the distance with the cellular station or the signal strength.

#### **Dual Mode Operation with Main and Sub PTT Buttons**

The IP730D series has two PTT buttons for main PTT and sub PTT. You can use one for LTE communication and the other for an IDAS<sup>™</sup>/Analog channel to answer the call.



radio conversations to the IDAS<sup>™</sup> group.

\* When using the Bridge function, operating time will be shorter and output power of the radio is reduced to 1 W. The Bridge function may be prohibited in some countries. Please check the legal requirements in your country before using this function.



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

# **IP Radios – LTE**

### Instant Wide Area Coverage Over an LTE (4G) and 3G Network\*

#### Simultaneous TalkListen<sup>™</sup>



Icom's IP Radios provide Simultaneous TalkListen™,

which allow users to talk and listen at the same time. This allows smooth, telephone-like conversation, or the ability to break into a call if required.

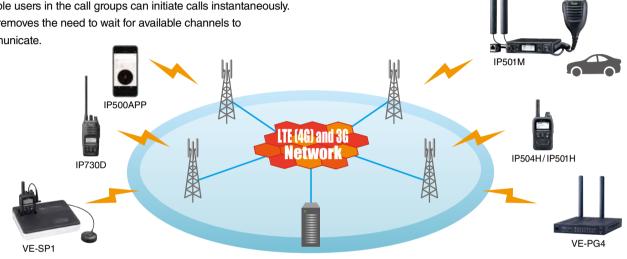
#### **Multiple-user Communication**

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

#### **One-to-many Communication**

Unlike mobile cell phones, IP radio users can immediately start talking to all the radios in the same talkgroup, with just a push of a "PTT" transmit button.

\* Network coverage provided by a custom SIM card. 3G service availability depends on the network operator.





### IP504H/IP501H(USA)/IP503H(EXPORT)

#### **Compact and Durable IP Handheld**

- 900 mW loud and high guality audio (IP504H/IP503H) IP67 dust-tight and waterproof
- Emergency Call, Lone Worker and Man Down functions Voice Record/Playback functions
- Vibration Alert function notifies of incoming calls Built-in Bluetooth® capability depending on
- version and GPS Simultaneous TalkListen™ function 17 hours battery life (with BP-272)

Photo shows IP501H

### Provisioning/FOTA (Firmware Over-the-Air)



### **IP501M**

### Mobile IP Radio Interoperable with the IP504H/IP501H

• Built-in Bluetooth<sup>®</sup> capability (depending on version) and GPS • Preprogrammed message transmission and reception • An Ethernet port for data communication (The optional VE-PG4 is required.) • Emergency call and Lone Worker functions • Noise Cancelling function (TX only) • IP54 • D-SUB 25-PIN connector with the optional OPC-2407 cable for interfacing other devices and various controls • Simultaneous TalkListen™ function • Provisioning/FOTA (Firmware Over-the-Air)



\* The IP radio is not supplied.

VE-SP1

### **Dispatch Converter**

 Portable operation with eight LR6 (AA) cells • Built-in loudspeaker and high sensitivity external microphone · Charges the radio when using the AC adapter



# **IP500APP** iOS<sup>™</sup>/Android<sup>™</sup> Application to Communicate with IP Radios\*

 Full-Duplex communication
 Short text message • Voice Recording/Playback function Address book • TX/RX history

\* IP500APP for iOS™: iOS™ version 12 or later IP500APP for Android™: Android™ version 8.0 or later IP500APP service may not be available depending on the country.

# **Satellite PTT Radios**

### **Real-Time Communications Across the Globe**

SATELLITE PTT (Push-To-Talk) is a two-way radio system that uses the Iridium<sup>®</sup> satellite network. It can be used as a communication tool in remote, isolated areas and the sea where there are no mobile phones or communications infrastructure. Even if the terrestrial network infrastructure is rendered unusable by human or natural disasters, SATELLITE PTT can provide a stable back-up, independent from other networks.



#### **One-to-Many Communications**



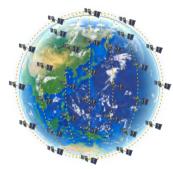
Unlike satellite phones, IC-SAT100/M users can immediately start talking to all the radios in the same talkgroup, with just a push of the transmit (PTT) button.

#### **Real-Time, Low-Latency Communication**



Using 66 Low Earth Orbit (LEO) Iridium<sup>®</sup> satellites, the IC-SAT100/M provides lowlatency communication, and broader, more reliable network coverage, compared to Geosynchronous Equatorial Orbit (GEO) satellites.

#### Total Global Coverage, including the Poles\*1



The Iridium<sup>®</sup> satellite network covers the entire globe including both poles, and can provide wide area global communications anywhere on the planet.

🔆 iridium

#### Conventional Radios and IP Phones Interconnection<sup>\*2</sup>



With a VE-PG4 RoIP gateway, the IC-SAT100/M can interconnect with an IP phone, IP, WLAN, IDAS<sup>™</sup> digital (Type-D multisite trunking and conventional systems.) and analog transceivers.

\*1 Subscription contracts are required for using the IC-SAT100/M. Depending on the country or region, carrying and/or use of the IC-SAT100/M may be prohibited. \*2 Optional VE-PG4 RoIP gateway and OPC-2412 connection cable are required for the IC-SAT100. Optional VE-PG4 RoIP gateway and a LAN cable are required for the IC-SAT100M.

# Satellite PTT Radios



### IC-SAT100 **Compact Handheld**

- IP67 waterproofing and dust-tight
- 1500 mW of powerful audio
- 14.5 hours of long lasting battery life\*
- · Emergency key on the top panel
- Short Data Message
- Voice Recording function • Built-in Bluetooth® capability depending on version
- SMA type antenna connection
- USB charging
- AES 256-bit encryption for security
- Multiple language display
- \* TX : RX : standby = 5 : 5 : 90.



Docking Station for In-Vehicle Use

# IC-SAT100M

### **In-Building and Vehicle Use**

- · Easy wiring works between the antenna unit (with RF unit) and main unit using a LAN cable (Cat 5e)\*1
- Power supply requirement: 13.2 V/26.4 V DC
- Antenna unit with RF unit: IP67, Main unit: IP54, Microphone: IP55 • 1500 mW audio output
- Voice Recording function 
   Short Data Message
- Built-in Bluetooth® capability depending on version
- Integrated GPS receiver
   AES 256-bit encryption
- Multiple language display
- For vehicle use, optional AH-40 must be used for optimal performance and environmental resilience.
- \*1 User supplied LAN cable is required to replace the supplied 20 m, 65.6 ft LAN cable. Maximum 100 m, 328 ft.

Microphone ▶

Main unit

···:·iridium

Antenna unit

їсом

#### Types of External Antennas for IC-SAT100

By replacing the IC-SAT100 antenna with an external antenna, satellite communication is possible even from a vehicle or building. Select the most suitable antenna according to the installation location and application.



\*1 Optional OPC-2422 coaxial cable (5 m, 16.4 ft) is required for more than 1.5 m, 4.9 ft extension.

\*2 Optional OPC-2113 or user supplied coaxial cable is separately required. Cable loss requirement is less than 3.4 dB loss at 1621 MHz.

\*3 Optional OPC-2462 or user supplied coaxial cable is separately required. Cable loss requirement is 12.5 - 13.0 dB loss at 1621 MHz. \*4 The distance from the main unit to the antenna is a rough guideline. The height of the building is an estimate assuming that the height of one floor is 3.5 m, 11.5 ft .

\*5 User supplied LAN cable is required to replace the supplied 20 m, 65.6 ft LAN cable. Connect your PoE injector or switch to extend the distance between the main unit and the antenna unit. (802.3at compatible)

#### IC-SAT100M In-Building Use

ГСОМ

You can flexibly install the IC-SAT100M and the antenna unit (with RF unit) with only a LAN cable (Maximum 100 m, 328 ft).\*5



Check the Icom website for more information





# **IP Radios – WLAN**

### **Full-Duplex Communication That Works Over a Wireless IP Network**

#### Wireless Communication System

Individual, Group,

and IP Phone Systems

with IP100FS.

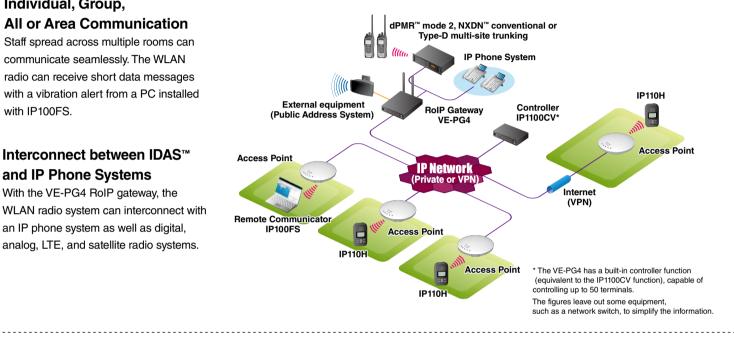
By deploying access points across an existing IP network, the WLAN radio system allows you to communicate from anywhere in a facility. The IP110H can access the nearest access point, and roam between access points.

#### Simultaneous TalkListen<sup>™</sup> Function



The Simultaneous TalkListen<sup>™</sup> function provides full-duplex one-to-many

communication which users can talk and receive at the same time like a telephone style conversation.





### **IP110H**

#### Compact Wireless LAN Radio with Simultaneous TalkListen<sup>™</sup> Function

- Licence-free wireless LAN radio using IEEE 802.11 a/b/g/n/ac standards (2.4 GHz and 5 GHz)\*
- WPA/WPA2/WPA-PSK/WPA2-PSK/WEP security IP67/IP54 1000 mW loud audio
- Voice recorder function Vibration alert function Motion/Stationary Detection, Man Down and Lone Worker functions for emergency call • Text message reception • Status messages • 20 hours battery life • USB Type-C<sup>™</sup> charging • Provisioning/FOTA (Firmware Over-the-Air)

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



# **IP100FS**

#### **Remote Communicator**

- Obtain location information of each IP110H
- Can be installed on a Windows<sup>™</sup> tablet PC as
- well as laptop PC



### **IP1100CV**

#### **WLAN Transceiver Controller**

- Capable of controlling up to 300 units WLAN radios (including IP100FS)
- 2.5 Gbps WAN Port and VPN Router function
- Up to 500 call addresses for individual and group calls
- · Calls can be recorded to an external USB device

# P25 Handheld Radios / Mobile Radios / Software



### IC-F7000 Series

#### P25 Conventional and Trunking, Smallest and Lightest of Its Class

- P25 Phase 1/2 Trunking capabilies 1024 channels IP68
- Color display Integrated GPS Bluetooth<sup>®</sup> capability depending on version microSD card slot Voice recording OTAP USB connector Active noise canceller FIPS certified AES/DES encryption<sup>\*1</sup> ARC4 40-bit software encryption OTAR 14 hours battery life (with BP-284) Motion/Stationary sensor Man down/Lone worker
- Vibration alert 
   Voice announcement 
   1300 mW loud audio
- Link Layer Authentication function\*2 (also known as P25 Radio Authentication)
- \*1 Optional \*2 Available soon

### IC-F7500 Series

#### P25 Conventional and Phase 1/2 Trunking Rugged Mobile Radio with Superior Class Leading Audio

- P25 Phase 1/2 Trunking capabilies 1024 channels
- Flexible configurations with detachable front panel IP55
- Color display Integrated GPS Bluetooth® capability depending on version
- microSD card slot Voice recording OTAP USB connector
- Active noise canceller FIPS certified AES/DES encryption\*1 ARC4 40-bit software
- encryption OTAR Lone worker Voice announcement
- Link Layer Authentication function\*2 (also known as P25 Radio Authentication)
- \*1 Optional \*2 Available soon



### CS-OTPM2

### Easily Reconfigure Radios with Over-the-Air Programming

- Radios can be reconfigured in a short period of time by transmitting only the updates
- 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
- \* Compatible models: IC-F7000/IC-F7500 series



# **IDAS<sup>™</sup> Digital Radios**



# Flexible Digital Migration Solutions with Advanced IP Network Integration

#### **Multiple-site Configurations**

IDAS<sup>™</sup> systems provide various digital radio solutions from simple peer to peer operation between two radios, up to multi-site wide area networks. Further coverage is enhanced with IP interconnection.

#### **Digital Clarity**

By adopting the industry standard AMBE+2<sup>™</sup> Vocoder and advanced FEC (Forward Error Correction) coding, IDAS<sup>™</sup> systems provide improved communication quality, clarity and reliability.

#### **Effective System Management**

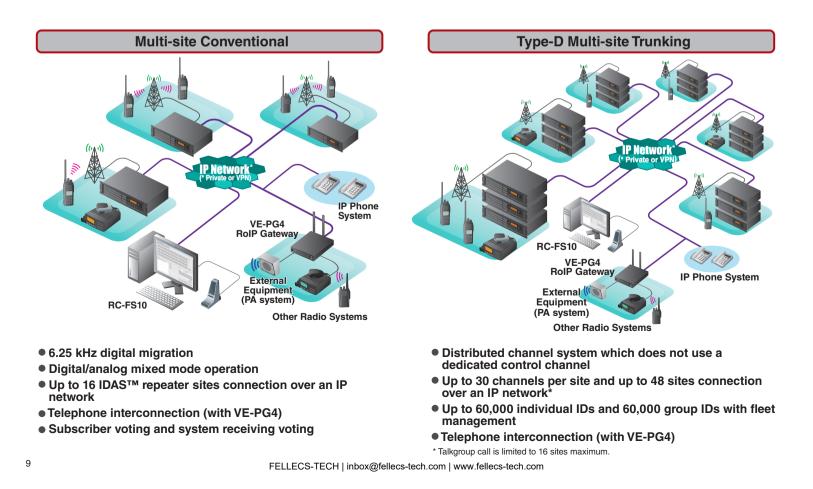
Simple and efficient management is critical for systems of any size. IDAS<sup>™</sup> provides effective system management with such features as OTAP and administration applications.

#### NXDN<sup>™</sup>/dPMR<sup>™</sup> Protocol Choice

The IDAS<sup>™</sup> digital radio system has two protocol choices, NXDN<sup>™</sup> or dPMR<sup>™</sup>. Both protocols are open digital radio standards using 6.25 kHz FDMA narrowband technology. With this flexible choice, the IDAS<sup>™</sup> radio system allows for interoperability with other manufacturers equipment to add to/replace existing NXDN<sup>™</sup> and/or dPMR<sup>™</sup> systems.

#### System Scalability According to Communication Traffic and Coverage

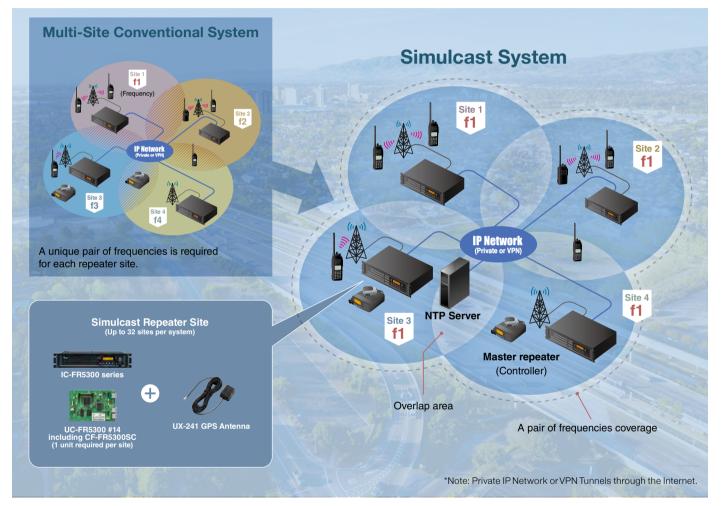
Depending on the communication traffic and coverage, an IDAS<sup>™</sup> radio system can be expanded from single site conventional to multi-site trunking, to match your communication needs.



### Wide Area Coverage on a Single Pair of Frequencies

The IDAS<sup>™</sup> Simulcast (NXDN<sup>™</sup> protocol) synchronizes multiple repeater sites<sup>\*</sup> for seamless wide area repeater coverage using just a pair of frequencies. Each repeater site in the system is simply composed of only a network controller, GPS antenna and repeater. A PPS (Pulse Per Second) signal from the GPS and an NTP server are used to synchronize the downlink signals.

\* The maximum number of sites for an IDAS™ Simulcast system is 32.

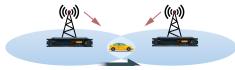


#### Ideal 6.25 kHz FDMA Technology for Simulcast

6.25 kHz FDMA technology has a lower symbol rate than other technologies, so it has an advantage regarding voice quality degradation due to latency.

#### Seamless Coverage

Simulcast repeaters transmit a signal on the same frequency and at the same time with GPS synchronization. Using the digital signal, the IDAS<sup>™</sup> simulcast system can greatly reduce signal degradation in overlapping areas.



### Scalability and Flexibility

Installation and maintenance of a simulcast system could not be easier. You can effortlessly expand the coverage area by just adding repeaters. Those repeaters can be integrated into the network with simple setup (no reprogramming of radio terminals is necessary).

#### Abundant IDAS™ Radio Lineup

All NXDN<sup>™</sup> compatible IDAS<sup>™</sup> radio terminals can be used on the IDAS<sup>™</sup> simulcast system. In addition, the radio terminals wait for a call without scanning, so the battery consumption can be reduced.

Repeaters transmit a downlink signal in sync at the same frequency.

# **IDAS<sup>™</sup> Handheld Radios**



### IC-F3400D/IC-F4400D Series

#### **IDAS<sup>™</sup>** The Smart Digital Solution

- 1024 channels IP68 Color display
- Integrated GPS Bluetooth® capability depending on version microSD card slot
- Voice recording OTAP OAA USB connector Active noise canceller
- AES\*/DES encryption 16.5 hours battery life (with BP-284) Motion/Stationary sensor
- Man down/Lone worker 
   Vibration alert 
   Voice announcement 
   1300 mW loud audio
   \* Optional

Conventional Simulcast Single/Multi-Site Trunking (Optional)

### IP730D/IP740D

#### Hybrid Handheld IP Radio for Local & Nationwide Communications

- 128 channels/8 zones Rotary encoder
- DTMF code transmission with optional DTMF microphone, HM-245T
- OTAP function Up to 500 ID numbers for IDAS™ mode 1500 mW loud audio (10% distortion)
- Individual, Group and All calls Talk back CTCSS and DTCS for analog mode

Conventional Simulcast



### IC-F52D/IC-F62D

#### **5 W Power Pack, Super Compact Body**

- 512 channels IP67 Full dot matrix display for 14 characters with status icons
- Bluetooth® capability depending on version 
   Voice recording 
   OTAP 
   OAA
- Active noise canceller 18.5 hours battery life (with BP-294) Motion/Stationary sensor
- Man down/Lone worker
   Vibration alert
   Voice announcement
   1300 mW loud audio

Conventional Simulcast Single/Multi-Site Trunking (Optional)



### IC-F1100D/IC-F2100D Series

#### Compact, Waterproof and Superiour Audio Clarity

• 128 channels (16 channels for non-display models) • IP67 • Motion/Stationary sensor

- Man down/Lone worker 18 hours battery life (with BP-280) 1500 mW loud audio OAA
- Voice announcement

Conventional Simulcast Single-Site Trunking

# **IDAS<sup>™</sup> Intrinsically Safe Radios**



### IC-F52D-UL/IC-F62D-UL

#### **UL Approved Intrinsically Safe Digital Radio**

• 512 channels • IP67 • Bluetooth<sup>®</sup> capability depending on version • Voice recording • OTAP • OAA • Active noise canceller • 10 hours battery life (with BP-292UL) • Motion/ Stationary sensor • Man down/Lone worker • Vibration alert • Voice announcement • 800 mW loud audio

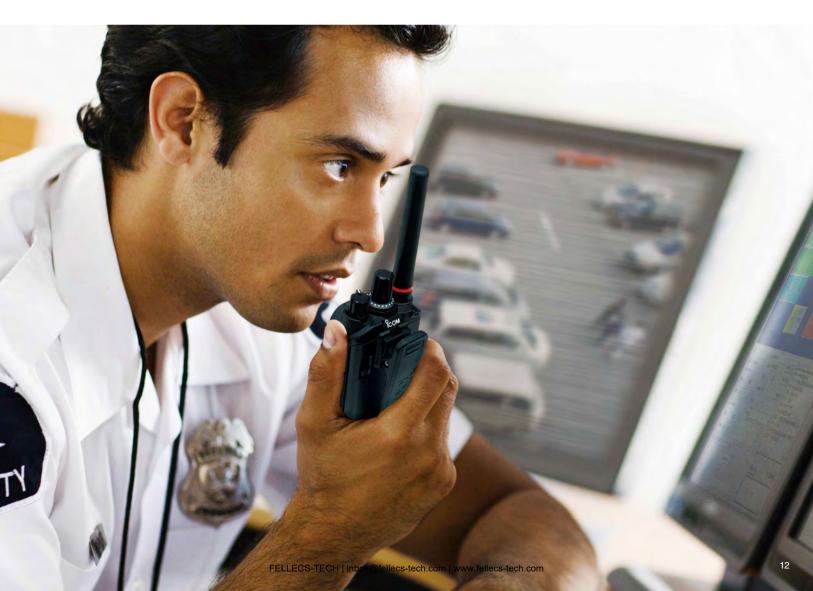


Single/Multi-Site Trunking (Optional)

#### **UL Classification Rating**

Intrinsically safe: Class I, Division 1, Groups C D; Class II, Division 1, Groups E F G; Class III. T3C. Non-incendive: Class I, Division 2, Groups A B C D. Ambient temperature: -20°C (-4°F) to +60°C (+140°F) Intrinsically Safe when used with BP-292UL battery pack.

DO NOT use the transceiver with any other equipment not specified in the option list (Pages 23–28). Please ask your dealer to ensure the UL Classification rating is acceptable for the intended place of use.



# **IDAS<sup>™</sup> Mobile Radios**



### IC-F5400D/IC-F6400D

#### Superb Performance and a Comprehensive Range of Features

- 1024 channels Flexible configurations with detachable front panel IP55 Color display
- Integrated GPS Bluetooth® capability depending on version
- microSD card slot Voice recording OTAP OAA USB connector Active noise canceller
- AES\*/DES encryption 
   Lone worker
   Voice announcement

\* Optional

Conventional Simulcast Single/Multi-Site Trunking (Optional)



### IC-F5330D/IC-F6330D

#### Vehicle and In-Building Use Radio with PoE Connection

• 128 channels • NXDN<sup>™</sup>Type-D single-site trunking • Flexible Power over Ethernet (PoE) connection between RF unit and remote control microphone<sup>\*</sup> • High contrast, wide viewing angle, negative type display • Bluetooth<sup>®</sup> capability depending on version • Emergency and Lone Worker functions • Status and short data message (SDM) • Optional D-SUB connector cable. \* Up to 100 m, 328 ft Ethernet cable

Conventional Simulcast Single-Site Trunking



### IC-F5130D/IC-F6130D

#### **Digital Standard Mobile Tranceiver**

- 128 channels NXDN<sup>™</sup> Type-D single-site trunking High contrast, wide viewing angle, black background display Emergency and Lone Worker functions
- Integration with the VE-PG4 Status and short data message (SDM) Optional D-SUB connector cable GPS receiver connection with optional ACC cable
- Bluetooth® capability with optional UT-137A





# **Digital Repeaters / Virtual Radio / System Management**

### IC-FR5300/IC-FR6300

#### Two Channels in One Box Repeater, Compatible with the Affordable, Low-Complexity Digital Simulcast



- Digital conventional mode and analog FM with auto selection 50 W at 50%, 25 W at 100% duty cycle operation (Ambient temperature: 25°C) With the optional UC-FR5300 #14 network controller and GNSS antenna, the IC-FR5300/IC-FR6300 can be compatible with digital simulcast systems
- Optional network controllers for multi-site conventional or trunking system configuration
- "Two channels in one box" configuration with optional UR-FR5300/UR-FR6300



### RC-FS10 Virtual Radio/PC Dispatch

PC remote communicator for IDAS<sup>™</sup> conventional, NXDN<sup>™</sup> Type-D multi-site trunking and analog radio systems (VE-PG4 is required for analog radio systems.)
 Up to eight different IDAS<sup>™</sup> 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
 Optional HM-152 or SM-26 microphone



### RS-MGR1

### Enhance System Management for NXDN<sup>™</sup> Type-D Trunking Systems

• 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



### **CS-OTPM1** Easily Reconfigure Radios with Over-The-Air Programming

• Remotely reconfigure radios while in the field • Radios can be reconfigured 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

- Manages up to 100,000 radios
- \* Compatible models: IC-F3400D/IC-F4400D series IC-F52D/IC-F62D IC-F52D-UL/IC-F62D-UL IC-F5400D/IC-F6400D



# **Analog Radios**



### IC-F1000/IC-F2000 Series

### Slim, Compact Dimensions with IP67 Waterproofing

- 128 channels (16 channels for the non-display model) Motion/Stationary sensor
- Man down/Lone worker 14 hours battery life (with BP-279) 1500 mW loud audio
- Voice announcement 16 codes inversion voice scrambler



### IC-F3000/IC-F4000 Series

### Affordable, High Performance Radio

• 16 channels • IP54 • Lone worker function • 14 hours battery life (with BP-264) • Built-in 2-Tone, 5-Tone, CTCSS and DTCS • 800 mW (typ.) loud audio speaker • Internal VOX capability for hands-free operation



## IC-F200

### Professional Radio for Compact Size and Easy Operation

- 16 channels Compact and lightweight IP54 / MIL810G 15 hours operation (with BP-304A)
- USB Type-C<sup>™</sup> charging 600 mW loud and clear audio Built-in CTCSS and DTCS
- Emergency call button on the top of the panel VOX function for hands-free operation



### IC-F5020/IC-F6020 Series IC-F5010/IC-F6010 Series

#### **Hardworking Mobile Radios**

2 models for display or non-display
128 channels (IC-F5020/IC-F6020 series) or 8 channels (IC-F5010/IC-F6010 series)
Lone worker function
4 W (typical) front mounted speaker
External device connection with optional ACC cable

# **HF** Radio



# IC-F8101

### A Professional HF, All in One Package

• 2G ALE (Automatic Link Establishment), MIL-STD-188-141B compatible • 125 W\* PEP output power (\* J3E/A1A modes depending on the transceiver version) • 100% duty cycle operation (SSB voice TX) • IP54 • 2400 bps MELPe/TWELP Vocoder and 256-bit AES encryption\* with RapidM TC4-LP (\* The function availability depending on the transceiver version)

# **MURS License-Free Radios**



### IC-V10MR

#### Professional Grade License-Free Radio Slim, Compact Dimensions with IP67 Waterproofing

- 5 MURS frequencies 2 W RF output power 2-Tone, MDC, CTCSS and DTCS capabilities
- IP67 waterproof 16 hours battery life (with BP-279) 1500 mW loud audio
- Built-in Motion sensor Lone Worker and Man Down functions Up to 2 miles in a work site\*
- Download free programming software



### IC-V3MR

### Rugged, Loud and Reliable Professional License-Free Radio

- 5 MURS frequencies 2 W RF output power 2-Tone, MDC PTT ID, CTCSS and DTCS capabilities
- IP54 Water and Dust protection 24 hours battery life (with BP-298)
- 1500 mW loud audio from internal speaker
- 1500 mW audio output from optional BTL speaker-microphone, HM-222HLWP
- Lone Worker function Up to 2 miles in a work site\* Download free programming software
- \* Communication range may differ depending on operating environment or weather conditions, etc.

# **Canada GMRS/FRS License-Free Radio**



### IC-U20GM

### Perfect Radio for Restaurants and Retail Shops Enhances Hospitality

- 22 Canada GMRS/FRS channels Compact and lightweight
- IP54 / MIL810G 19 hours operation (with BP-304A)
- USB Type-C<sup>™</sup> charging 600 mW loud and clear audio
- Built-in CTCSS and DTCS
- VOX function for hands-free operation

# PMR 446 License-Free Radio (for EUROPE/EXPORT only)



### IC-U20SR

#### Perfect Radio for Restaurants and Retail Shops Enhances Hospitality

- 16 PMR 446 channels Compact and lightweight IP54 / MIL810G
- 21 hours operation (with BP-304A) USB Type-C<sup>™</sup> charging 600 mW loud and clear audio
- Built-in CTCSS and DTCS 
   Emergency call button on the top of the panel
- Smart-ring function to check communication range Alert-ring function for emergency situation
- VOX function for hands-free operation

# **RoIP Gateway**

# Radio Gateway — Link LTE Radios to Digital/Analog Radios, Satellite PTT Radios, WLAN Radio, IP Phone and More

The VE-PG4 is a versatile RoIP (Radio over IP) gateway unit, which seamlessly interconnects various communication systems. The built-in LTE module\* provides virtually nationwide communication coverage.

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





# P25 Radio Feature Comparison

		IC-F700	) SERIES	IC-F750	OO SERIES		
		IC-F7010T/S IC-F7020T/S	IC-F7040T/S	IC-F7510 IC-F7520	IC-F7540		
Frequency Rang	ge	136–174 MHz 380–470 MHz 450–512 MHz	769–869 MHz	136–174 MHz 380–470 MHz 450–512 MHz			
Channels		10	24	1	024		
Channel Spaci	ng	12.5/25 kHz	12.5/20/25 kHz	12.5/25 kHz	12.5/20/25 kHz		
<b>Dimensions</b> <sup>*1</sup> (W $\times$ H $\times$ D; Proje	(mm; in) ctions are not included)		3.5 × 38.2; .9 × 1.5		55 × 150; 6.6 × 1.6		
Weight*1 (appro	x.)	355 g, 12.5 oz	345 g, 12.2 oz	1500	g, 3.3 lb		
RF Output Pow	er (High)	5 W	3 W	50 W (VHF), 45 W (UHF	i) 30/35 W (700/800 MHz)		
IP Rating		IP	68	I	P55		
Operating Time*1*2 (hours)		1	4		N/A		
Display		Colo	r LCD	Col	or LCD		
Keypad		Y	es		Yes		
AF Output Pow	er	1300 n	nW typ.	4 \	V typ.		
Analog Conver	ntional	Y	es		Yes		
P25 Convention	nal	Y	es	Yes			
D25 Trunking	Phase 1 (FDMA)	Optional		Op	tional		
P25 Trunking	Phase 2 (TDMA)	Optional		Op	tional		
	AES	Opt	onal	Op	tional		
Encryption	DES	Opt	onal	Op	tional		
	ARC4	Opt	onal	Optional			
FIPS 140-2 Lev	el 1	Opt	onal	Optional			
P25 Link Layer	Authentication	Yes (Avail	able soon)	Yes (Available soon)			
P25 Convention	nal Voting Scan	Opt	onal	Optional			
P25 Packet Dat	a Service	Opt	onal	Optional			
OTAP Function		Opt	onal	Optional			
CTCSS/DTCS	Encoder/Decoder	Y	es		Yes		
2-Tone	Encoder/Decoder	Y	es		Yes		
DTMF Autodial		Y	es		Yes		
Analog Voice S	crambler (Inversion)	Y	es		Yes		
MDC 1200		Y	es		Yes		
Front Panel Pro	ogramming	Opt	onal	Op	tional		
Man Down		Y	es		No		
Lone Worker		Y	es		Yes		
Voice Annound	ement	Y	es		Yes		
Vibration Alert		Yes			No		
Voice Recorder	·	Yes			Yes		
Bluetooth® Cap	ability	Yes		Yes			
GPS Receiver		Y	es	Yes*3			
Front Panel Se	paration	N	/A	Op	tional		
COMMANDMIC	™ Capability	N	/A		Yes		

\*1 With standard battery pack \*2 Conventional mode. 5:5:90 duty cycle, power save ON \*3 UX-241 antenna is required.

FELLECS-TECH | inbox@fellecs-tech.com | www.fellecs-tech.com All stated specifications and features are subject to change without notice or obligation.



# IDAS<sup>™</sup> Handheld Radio Feature Comparison

		IC-F3400D/IC-F4400D SERIES	IP730D IP740D	IC-F52D IC-F62D	IC-F1100D, Sef		IC-F52D-UL IC-F62D-UL
		IC-F3400DT/DS IC-F4400DT/DS	IP730D IP740D	IC-F52D IC-F62D	IC-F1100DT/DS IC-F2100DT/DS	IC-F1100D IC-F2100D	IC-F52D-UL IC-F62D-UL
		136–174 MHz	136–174 MHz	136–174 MHz	136–17	74 MHz	136–174 MHz
Frequency Rang	je	380–470 MHz 450–512 MHz	350–470 MHz 400–520 MHz	350–400 MHz 400–470 MHz 450–512 MHz 450–520 MHz	350–400 MHz 400–470 MHz 450–520 MHz		350–400 MHz 400–470 MHz 450–512 MHz 450–520 MHz
Channels		1024*1	128	512	12	28	512
Digital Channel	Spacing	6.25/12.5 kHz	6.25 kHz	6.25/12.5 kHz	6.25	kHz	6.25/12.5 kHz
Dimensions*2 (mm; in) (W × H × D; Projections are not included)		53.6 × 123.5 × 29.3; 2.1 × 4.9 × 1.2	61.7 × 140.5 × 42.8; 2.4 × 5.5 × 1.7	56 × 91.5 × 36.5; 2.2 × 3.6 × 1.4	52.2 × 111.8 × 34.1; 2.1 × 4.4 × 1.3 (DT) 52.2 × 111.8 × 29.4; 2.1 × 4.4 × 1.2 (DS)	52.2 × 111.8 × 29.4; 2.1 × 4.4 × 1.2	56 × 92 × 34.1; 2.2 × 3.6 × 1.3
Weight*2 (approx.)		340 g, 12.0 oz (VHF) 335 g, 11.8 oz (UHF)	320 g, 11.3 oz	270 g, 9.5 oz	280 g, 9.9 oz (DT) 270 g, 9.5 oz (DS)	260 g, 9.2 oz	270 g, 9.5 oz
RF Output Power (High)		5 W	5 W	5 W	5 W (VHF), 4 W *Depending c	/ or 5 W* (UHF) on the version	5 W
IP Rating		IP68	IP67	IP67	IP67		IP67
Dperating Time*2*3 (hours)		16.5	24 (LTE mode) 13 (IDAS mode)	18.5	18		10
Display		Yes	Yes	Yes	Yes	No	Yes
Keypad		Yes	Limited	Yes	Yes	No	Yes
AF Output Pow	er (internal SP)	1300 mW typ.	1500 mW typ. (10% distortion)	1300 mW typ.	1500 n	nW typ.	800 mW typ.
ntrinsically Sat	ie	No	No	No	No		UL
Incryption	DES	Yes	No	No	No		No
Incryption	AES	Optional	No	No	N	lo	No
oice Scramble	r (Digital)	Yes	Yes	Yes	Ye	es	Yes
oice Scramble	r (Analog)*4	Yes (Inversion)	No	Yes (Inversion)	N	lo	Yes (Inversion)
OTAP (Over-the	-Air Programming)	Optional	Yes (Over LTE)	Optional	N	lo	Optional
TCSS/DTCS	Encoder/Decoder	Yes	Yes	Yes	Ye	es	Yes
-Tone	Encoder/Decoder	Yes	No	Yes	Ye	es	Yes
-Tone	Encoder/Decoder	Yes	No	Yes	Ye	es	Yes
OTMF Autodial		Yes	Yes (With optional HM-245T)	Yes	Ye	es	Yes
/IDC 1200		Yes	No	Yes	Ye	S* <sup>5</sup>	Yes
lan Down		Yes	Yes	Yes	Ye	es	Yes
Notion Detection	on Sensor	Yes	Yes	Yes	Ye	es	Yes
one Worker		Yes	Yes	Yes	Ye	es	Yes
/oice Announc	ement	Yes	No	Yes	Ye	es	Yes
ibration Alert		Yes	Yes	Yes	N	lo	Yes
oice Recorder		Yes	Yes	Yes	N	lo	Yes
Bluetooth® Cap	ability	Yes	Yes	Yes	N	lo	Yes
GPS Receiver		Yes	Yes	External	Exte	ernal	No
Multi-Site Conv	entional	Yes	Yes	Yes	Ye	es	Yes
Type-D Single-	site Trunking	Optional	No	Optional	Ye	es	Optional
Type-D Multi-si	te Trunking	Optional	No	Optional	N	lo	Optional



### IDAS<sup>™</sup> Mobile Radio Feature Comparison

		IC-F5400D IC-F6400D	IC-F5330D IC-F6330D	IC-F5130D IC-F6130D
		IC-F5400D IC-F6400D	IC-F5330D IC-F6330D	IC-F5130D IC-F6130D
		136–174 MHz	136–174 MHz	136–174 MHz
Frequency Rang	ge	380–470 MHz 450–512 MHz	400–520 MHz	400–520 MHz
Channels		1024*1	128	128
Digital Channe	I Spacing	6.25/12.5 kHz	6.25kHz	6.25 kHz
Dimensions (n (W × H × D; Projec	nm; in) ctions are not included)	174 × 55 × 150; 6.9 × 2.2 × 5.9	150 × 45 × 148; 5.9 × 1.8 × 5.8	150 × 45 × 151.8; 5.9 × 1.8 × 6.0
Weight (approx	.)	1.5 kg, 3.3 lb	1.2 kg, 2.6 lb (Main unit) 250 g, 8.8 oz (Microphone)	1.23 kg, 2.7 lb
RF output pow	er (High)	50 W (VHF) 45 W (UHF)	50 W (VHF) 45 W (UHF)	50 W (VHF) 45 W (UHF)
IP Rating		IP55	IPX4 (Microphone)	N/A
Display		Yes	Yes (Mic.)	Yes
Keypad		Yes	Yes (Mic.)	Yes
AF Output Pow	er (internal SP)	4 W typ.	1.5 W typ. (Mic.)	4 W typ.
	DES	Yes	No	No
Encryption	AES	Optional	No	No
Voice Scramble	er (Digital)	Yes	Yes	Yes
Voice Scramble	r (Analog)*4	Yes (Inversion)	No	No
OTAP (Over-the-	Air Programming)	Optional	No	No
CTCSS/DTCS	Encoder/Decoder	Yes	Yes	Yes
2-Tone	Encoder/Decoder	Yes	Yes	Yes
5-Tone	Encoder/Decoder	Yes	Yes	Yes
DTMF Autodial		Yes	Yes	Yes
MDC 1200		Yes	Yes*5	Yes*5
Lone Worker		Yes	Yes	Yes
Voice Annound	ement	Yes	No	No
Voice Recorder		Yes	No	No
Bluetooth <sup>®</sup> Cap	ability	Yes	Yes*6	Optional
GPS Receiver		Yes*7	No	No
Front Panel Se	paration	Optional	No	No
Multiple Contro	oller Capability	Yes	No	No
COMMANDMIC <sup>™</sup> Capability		Yes	Yes	No
I/O Control Por	t	USB, D-SUB	Optional*8	Optional*8
Multi-Site Conv	rentional	Yes	Yes	Yes
Type-D Single-	site Trunking	Optional	Yes	Yes
Type-D Multi-si	te Trunking	Optional	No	No

- \*1 Upgrade licence (ISL-CHEX) required to enable 4000 channel capacity.
- \*2 With standard battery pack
- \*3 IDAS : Conventional mode, 5:5:90 duty cycle, power save ON, LTE : Depending on the condition of LTE signal strength When using the Bridge function, operating time will be shorter and output power of the IP730D/ IP740D is reduced to 1 W.
- \*4 Inversion type voice scrambler is not compatible with UT-109R/UT-110R voice scrambler.
- $^{\star 5}$  PTT ID, emergency call, radio check (RX) and stun/revive (RX)
- \*6 Depending on the version.
- \*7 UX-241 antenna is required.
- \*8 D-SUB. Digital modulation input is not available even when using accessory cables.

All stated specifications and features are subject to change without notice or obligation.



# Analog Radio Feature Comparison

					HANDHELD RA	DIOS		MOBILI	RADIOS	MURS F	ADIOS
			IC-F1000T IC-F2000T	IC-F1000S IC-F2000S	IC-F1000 IC-F2000	IC-F3001/3 IC-F4001/3	IC-F200	IC-F5021/3/3H IC-F6021/3/3H	IC-F5011/3/3H IC-F6011/3/3H	IC-V10MR	IC-V3MR
				136–174 MHz		136–174 MHz		136–1	74 MHz		
Frequency Range			335–380 MHz 400–470 MHz 450–512 MHz 450–520 MHz			350–400 MHz 400–470 MHz 450–512 MHz 450–520 MHz	450–470 MHz	450-5	70 MHz 12 MHz 20 MHz	151.820, 151.880, 151.940, 154.570, 154.600 MHz	151.820, 151.880, 151.940, 154.570, 154.600 MHz
Channels			128	128	16	16	16	128	8	16	16
Channel Spacing				12.5/25 kHz		12.5/25 kHz, 15/30 kHz	12.5 kHz	12.5/25 kHz, 15/30 kHz		11.25/20 kHz	11.25/20 kHz
Dimensions <sup>*1</sup> (mm; (W × H × D; Projections a		included)	52.2 × 111.8 × 24.5; 2.1 × 4.4 × 1.0		56 × 97 × 36.4; 2.3 × 4.4 × 1.4	94 × 50 × 26.7; 3.7 × 2.0 × 1.1	$\begin{array}{c} 150 \times 40 \times 167.5;\\ 5.9 \times 1.6 \times 6.6 \ (50/45 \ W)\\ 150 \times 40 \times 117.5;\\ 5.9 \times 1.6 \times 4.6 \ (50/45 \ W)\end{array}$		52.2 × 111.8 × 24.5; 2.1 × 4.4 × 1.0	56 × 97 × 36.4; 2.3 × 4.4 × 1.4	
Weight*1 (approx.)				240 g, 8.5 oz		270 g, 9.5 oz	157 g, 5.5 oz	1.1 kg, 2.4 lb (50/45 W) 0.8 kg, 1.8 lb (25 W)		240 g, 8.5 oz	270 g, 9.5 oz
		/HF		5 W		5 W	-	50 W (F5021/3H) 50 W (F5011/3H) 25 W (F5023) 25 W (F5013)			2 W
RF output power (Hi	· ·	JHF	4 W			4 W	2.0 W or less	45 W (F6021/3H) 25 W (F6023)	45 W (F6011/3H) 25 W (F6013)	2W	2 W
IP Rating			IP67			IP54	IP54	1	J/A	IP67	IP54
Operating Time*2 (ho	urs)		14		20 (w/ BP-265) 14 (w/ BP-264)	15	N/A		16	24	
Display			Yes	Yes	No	No	Yes	Yes	LED lighting	No	No
Keypad			Full	Limited	No	No	Limited	Ň	/es	No	No
AF Output Power (in	ernal	SP)		1500 mW typ.		800 mW typ.	600 mW typ.	4 V	V typ.	1500 mW typ.	1500 mW typ.
Voice Scrambler				Yes (Inversion)		No	No		No	No	No
CTCSS/DTCS Enco	der/D	Decoder		Yes		Yes	Yes	١	/es	Yes	Yes
2-Tone Enco	der/D	Decoder		Yes		Yes	No	Ŋ	/es	Yes	Yes
5-Tone Enco	der/D	Decoder		Yes		Yes	No	)	/es	No	No
DTMF Autodial				Yes		Yes	No	Y	/es	Yes	Yes
MDC 1200				Yes*3		Yes*5	No	Y	€S <sup>*6</sup>	Yes*3	Yes*5
Man Down				Yes		No	No		No	Yes	No
Lone Worker				Yes		Yes	Yes	<u> </u>	/es	Yes	Yes
Motion Detection Se	nsor			Yes		No	No		No	Yes	No
Voice Announcemer	t			Yes		No	Yes		No	Yes	No
Stun/Kill/Revive				Yes*4		Yes*4	No	Y	€S <sup>*4</sup>	Yes*4	Yes*4
Remote Monitor				Yes*4		Yes*4	No	Y	es*4	Yes*4	Yes*4

\*1 With standard battery pack
 \*2 5:5:90 duty cycle, power save ON
 \*3 PTT ID, emergency (TX/RX), radio check (RX), stun/revive (RX), transmit status messages only

\*4 RX only

\*5 PTT ID and emergency only \*6 PTT ID, emergency (TX/RX), radio check (RX), stun/revive (RX) only

All stated specifications and features are subject to change without notice or obligation.



# Satellite PTT & IP Radios – LTE, Hybrid & WLAN Feature Comparsion

	SATELL	ITE PTT
	IC-SAT100	IC-SAT100M
Frequency Range	1616–1626.5 MHz	1616–1626.5 MHz
Talkgroups	15 (Max.)	15 (Max.)
Dimensions (mm; in) (W × H × D; Projections are not included)	57.8 × 135 × 32.8; 2.3 × 5.3 × 1.3	Antenna unit (with RF unit): 76.8 × 200 × 76.8; 3 × 7.9 × 3, Main unit: 125 × 29 × 156.5; 4.9 × 1.1 × 6.2
Weight (approximate)	360 g, 12.7 oz (with BP-300 and antenna)	Antenna unit (with RF unit): 500 g, 1.1 lb Main unit with microphone: 1.2 kg, 2.6 lb
IP Rating	IP67	IP67 (Antenna unit (with RF unit)), IP55 (mic), IP54 (main unit)
Operating Time (Hours)	14.5	-
Display	Yes	Yes
Keypad	Limited	Limited
AF Output Power (Internal SP)	1500 mW typical	1500 mW typical
Encryption AES	Yes	Yes
Vibration Alert	Yes	N/A
Voice Recorder	Yes	Yes
Bluetooth <sup>®</sup> Capability	Yes	Yes
GPS Receiver	Yes	Yes
Short Data Message	Yes	Yes
Emergency Call	Yes	Yes
PoE Capability		Yes
I/O Control Port	USB, 14-PIN ACC	D-SUB, LAN, Ignition sense

		WLAN RADIO			
		IP110H			
Network (USA Versions)	WLAN	IEEE 802.11 a/b/g/n/ac 2.4-2.4835 GHz, 5.15-5.35, 5.47-5.85 GHz			
Dimensions ( (W × H × D; Proje	mm; in) ections are not included)	57 × 96.9 × 25.1 ; 2.2 × 3.8 × 1.0			
Weight (appro>	kimate)	146 g, 5.2 oz			
IP Rating		IP67 / IP54			
Operating Tim	ne (Hours)	20			
Display		Yes			
Keypad		Limited			
AF Output Por	wer (Internal SP)	1000 mW			
Provisioning/F	OTA	Yes			
Man Down		Yes			
Lone Worker		Yes			
Vibration Aler	t	Yes			
Voice Recorde	ər	Yes			
Bluetooth® Ca	pability	Yes			
GPS Receiver		No			
Short Data Me	essage	Yes			
Emergency Ca	all	Yes			
I/O Control Po	ort	_			

				IP Radios – LTE & Hybrid		-
		IP730D/IP740D	IP504H	IP501H	IP503H	IP501M
Network	<b>LTE</b> (4G)	B2, B4, B12	B2, B4, B5, B12, B13, B14, B25, B26, B41, B66, B71	B2, B4, B5, B17	B1, B3, B7, B8, B20	B2, B4, B12
(USA Versions)	3G	B2, B5	-	B2, B5	B1, B8	B2, B5
Dimensions (W × H × D; Proj	(mm; in) jections are not included)	61.7 × 140.5 × 42.8; 2.4 × 5.5 × 1.7	59 × 95 × 32; 2.3 × 3.7 × 1.3	59 × 95 × 32; 2.3 × 3.7 × 1.3	59 × 95 × 32; 2.3 × 3.7 × 1.3	125 × 29 × 156; 4.9 × 1.1 × 6.1
Weight (approx	ximate)	320 g, 11.3 oz	TBD	240 g, 8.5 oz	240 g, 8.5 oz	840 g, 1.9 lb (main unit)
IP Rating		IP67	IP67	IP67	IP67	IP54
Operating Time (Hours)		24 (LTE mode), 13 (IDAS mode)	17	17	17	-
Display		Yes	Yes	Yes	Yes	Yes
Keypad		Limited	Limited	Limited	Limited	Limited
AF Output Po	wer (Internal SP)	1500 mW typ. (10% distortion)	900 mW (10% distortion)	400 mW (10% distortion)	900 mW (10% distortion)	4 W (Extrenal SP)
Provisioning/	FOTA	Yes	Yes	Yes	Yes	Yes
Man Down		Yes	Yes	Yes	Yes	-
Lone Worker		Yes	Yes	Yes	Yes	Yes
Vibration Aler	rt	No	Yes	Yes	Yes	-
Voice Record	er	Yes	Yes	Yes	Yes	Yes
Bluetooth® Ca	apability	Yes	Yes	Yes	Yes	Yes
GPS Receiver	r	Yes	Yes	Yes	Yes	Yes
Short Data M	essage	Yes (LTE mode)	Yes	Yes	Yes	Yes
Emergency C	all	Yes	Yes	Yes	Yes	Yes
I/O Control Port		-	-	-	-	LAN, Ignition sense, D-SUB (optional)

				В		(S			
MODEL NAME	BP-292UL Li-ion 72 V/1910 mAh (min.) 2010 mAh (typ.)	BP-300 Li-ion 72 V/2200 mAh (min.) 2350 mAh (typ.)	BP-303 Li-ion 72 V/3200 mAh (min.) 3350 mAh (typ.)	BP-271 Li-ion 7.4 V/1150 mAh (min.) 1200 mAh (typ.)	<b>BP-272</b> Li-ion 74 V/1880 mAh (min.) 2000 mAh (typ.)	BP-307 Li-ion 72 V/3050 mAh(min.) 3150 mAh (typ.)	BP-284 Li-ion 72 V/3070 mAh (min.) 3210 mAh (typ.)	BP-294 Li-ion 72 V/3050 mAh (min.) 3150 mAh (typ.)	BP-290 Li-ion 72 V/1910 mAh (min.) 2010 mAh (typ.)
IC-SAT100		<b>v</b>							
IP730D, IP740D			<ul> <li>✓</li> </ul>						
IP501H, IP504H, IP503H				~	~	~			
IP110H									
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S							~		
IC-F3400DT/DS, IC-F4400DT/DS							<ul> <li>✓</li> </ul>		
IC-F52D, IC-F62D								~	~
IC-F1100DT/DS/D, IC-F2100DT/DS/D									
IC-F52D-UL, IC-F62D-UL	<ul> <li>✓</li> </ul>								
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR									
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR									
IC-F200, IC-U20GM, IC-U20SR									

			В	ATTERY CASE	S				
MODEL NAME	BP-280 Li-ion 72 V/2280 mAh (min.) 2400 mAh (typ.)	<b>BP-279</b> Li-ion 72 V/1485 mAh (min.) 1570 mAh (typ.)	BP-278 Li-ion 72 V/1130 mAh (min.) 1190 mAh (typ.)	BP-265 Li-ion 72 V/2100 mAh (min.) 2250 mAh (typ.)	BP-298 Li-ion 72 V/2100 mAh (min.) 2250 mAh (typ.)	BP-304A Li-ion 3.6V /2270 mAh (min.) 2350 mAh (typ.)	BP-305 LR6 (AA) ×5 cells	BP-291 LR6 (AA) ×5 cells	BP-263 LR6 (AA) ×6 cells
IC-SAT100									
IP730D, IP740D							~		
IP501H, IP504H, IP503H									
IP110H									
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S									
IC-F3400DT/DS, IC-F4400DT/DS									
IC-F52D, IC-F62D								<ul> <li>✓</li> </ul>	
IC-F1100DT/DS/D, IC-F2100DT/DS/D	~	~	~						
IC-F52D-UL, IC-F62D-UL									
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR	✔(For IC-F1000/IC-F2000series) <sup>*1</sup>	<b>~</b>	(For IC-F1000/IC-F2000series) <sup>*1</sup>						
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR				✔(For IC-F3001/IC-F4001series)*2	✔(For IC-V3MR)				<ul> <li>✓</li> </ul>
IC-F200, IC-U20GM, IC-U20SR						<ul> <li>✓</li> </ul>			

				CHARGERS	/ CRADLES			
MODEL NAME	BC-241 <sup>*4</sup> Rapid charger	BC-219N*4 Rapid charger	BC-225 <sup>*4</sup> Intelligent charger	BC-226 Rapid charger Connectable type	BC-227 <sup>*4</sup> Rapid charger	BC-213 <sup>*4</sup> Rapid charger	BC-262 Charging cradle	BC-264 Battery charger
	TT TT							
IC-SAT100	<ul> <li>✓</li> </ul>							
IP730D, IP740D				~	<ul> <li>✓</li> </ul>			
IP501H, IP504H, IP503H								
IP110H								
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>		~			
IC-F3400DT/DS, IC-F4400DT/DS		~	<ul> <li>✓</li> </ul>	~	<ul> <li>✓</li> </ul>			
IC-F52D, IC-F62D		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	V	<ul> <li>✓</li> </ul>			
IC-F1100DT/DS/D, IC-F2100DT/DS/D						~		
IC-F52D-UL, IC-F62D-UL				✓*3	✓*3			
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR						~		
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR								
IC-F200, IC-U20GM, IC-U20SR							~	✓*5

\*<sup>1</sup> Except IC-V10MR \*<sup>2</sup> Except IC-V3MR \*<sup>3</sup> The battery charger, BC-226, or BC-227 **must not be used** in an explosive atmosphere. \*<sup>4</sup> AC adapter supplied, depending on charger version. \*<sup>5</sup> Either AC adapter, BC-263A or USB cable (Type-C to Type A) supplied, depending on charger version. The IC-F52D-UL/IC-F62D-UL models should only be used with the specified approved options.

			CHARGERS	/ CRADLES			READER SOFTWARE
MODEL NAME	<b>BC-193</b> <sup>*4</sup> Rapid charger for BP-265	<b>BC-240</b> <sup>*4</sup> Rapid charger for BP-298	<b>BC-202IP3L</b> Connectable type Connects up to six BC-202IP3L units.	<b>BC-202IP2</b> *4 Rapid charger with smart charging function	<b>BC-218</b> <sup>*4</sup> Rapid charger with Bluetooth <sup>®</sup> function	<b>BC-257</b> <sup>*4</sup> Charger stand Connects up to four BC-257 units.	RS-BC225 Intelligent charger software for Windows™ PC
IC-SAT100							
IP730D, IP740D							
IP501H, IP504H, IP503H			<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	~		
IP110H						(Use with OPC-2480*6 /BC-228)	
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S							✔(Use with BC-225)
IC-F3400DT/DS, IC-F4400DT/DS							(Use with BC-225)
IC-F52D, IC-F62D							(Use with BC-225)
IC-F1100DT/DS/D, IC-F2100DT/DS/D							
IC-F52D-UL, IC-F62D-UL							
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR							
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR	✔(For IC-F3001/IC-F4001series)*2	✔(For IC-V3MR)					
IC-F200, IC-U20GM, IC-U20SR							

	MULTI-C	HARGERS / C	RADLES			AC ADA	PTERS		
MODEL NAME	BC-214N*4 Either AD-130 AD-132N or AD-140 is supplied with the BC-214N.	BC-211*4	BC-268 Charging cradle BC-228 is supplied with the BC-268.	BC-242 12 V/1 A	BC-1235 <sup>r5</sup> 12 V/1A L-shape plug	BC-1235 <sup>15</sup> 12 V/1 A straight plug for BC-226/BC- 202IP3Usingleunit	<b>BC-1575</b> 12 V/75A	BC-228 15 V/4 A	<b>BC-2075</b> 12 V/4.2 A
IC-SAT100	(#30/31, AD-140 installed)			(Use with BC-241)			V (Use with BC-214N)		
IP730D, IP740D	(#62/63, AD-132N installed)				(Use with BC-227)	✔ (Use with BC-226)	V (Use with BC-214N)	(Use with BC-226)	
IP501H, IP504H, IP503H		(AD-127 installed)			✔(Use with BC-202IP2)	✔(Use with BC-202IP3L)	V (Use with BC-211)	✔ (Use with BC-202IP3L)	(Use with BC-218)
IP110H								(Use with BC-257)	
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	(#62/63, AD-132N installed)				(Use with BC-225, BC-227 or BC-219N)		V (Use with BC-214N)		
IC-F3400DT/DS, IC-F4400DT/DS	(#62/63, AD-132N installed)				(Use with BC-225, BC-227 or BC-219N)	✔ (Use with BC-226)	V (Use with BC-214N)	V (Use with BC-226)	
IC-F52D, IC-F62D	(#62/63, AD-132N installed)				(Use with BC-225, BC-227 or BC-219N)	✔ (Use with BC-226)	V (Use with BC-214N)	(Use with BC-226)	
IC-F1100DT/DS/D, IC-F2100DT/DS/D	✔ (#42/43, AD-130 installed)			V(Use with BC-213)	(Use with BC-213)		V (Use with BC-214/N)		
IC-F52D-UL, IC-F62D-UL					✔(Use with BC-227)			V (Use with BC-226)	
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR	✔(#42/43, AD-130 installed)			(Use with BC-213)	(Use with BC-213)		V (Use with BC-214/N)		
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR	(#27/28, AD-139 installed for IC-V3MR)			(Use with BC-240 for IC-V3MR)	(Use with BC-191)				
IC-F200, IC-U20GM, IC-U20SR			(Use with BC-228)					(Use with BC-268)	

	AC ADAPTERS	СН	ARGER CABL	.ES	DC POWER CABLES	SPEA	KER-MICROPH	IONES
MODEL NAME	BC-263A 5 V/1 A (USB Type-C <sup>TM</sup> )	CP-23L For 12 V DC	CP-22 With DC-DC CONVERTER	CP-25H For 12 V DC	OPC-515L	HM-245T With SUB PTT button	HM-236 IP57	HM-184UL
IC-SAT100								
IP730D, IP740D		V (Use with BC-227)			(Use with BC-227)	~	~	
IP501H, IP504H, IP503H		(Use with BC-218)	V (Use with BC-218)	✔ (Use with BC-202IP3L)				
IP110H								
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S		✔ (Use with BC-219N or BC-227)			V (Use with BC-219N, BC-225 or BC-227)			
IC-F3400DT/DS, IC-F4400DT/DS		Use with BC-219N or BC-227)			V (Use with BC-219N, BC-225 or BC-227)			
IC-F52D, IC-F62D		V (Use with BC-219N or BC-227)			V (Use with BC-219N, BC-225 or BC-227)			
IC-F1100DT/DS/D, IC-F2100DT/DS/D		V (Use with BC-213)						
IC-F52D-UL, IC-F62D-UL		(Use with BC-227)			(Use with BC-227)			<ul> <li>✓</li> </ul>
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR		V (Use with BC-213)						
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR		V (Use with BC-193 or BC-240)			V (Use with BC-193 or BC-240)			
IC-F200, IC-U20GM, IC-U20SR	V (Use with IC-F200 and IC-U20GM)							

\*<sup>6</sup> BC-123SA for USA plug, SE for EURO plug, SV for Australia plug, and SUK for UK plug.
\*<sup>6</sup> OPC-2480 is a USB Type-C<sup>™</sup> cable, which is supplied with the IP110H.

: Applicable : Not applicable

				SPEA	KER-MICROPI	HONES			
MODEL NAME	HM-222H BTL speakermicrophone*7	HM-184H	HM-168LWP Waterproof connector	HM-158LA	HM-159LA	HM-222HLWP BTL speaker-microphone <sup>46</sup>	HM-222HLS BTL speakermicrophone	HM-183LS	HM-186LS
IC-SAT100	~								
IP730D, IP740D	~	~							
IP501H, IP504H, IP503H							(For IP504H and IP503H)	~	~
IP110H									
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	~								
IC-F3400DT/DS, IC-F4400DT/DS	~								
IC-F52D, IC-F62D	~								
IC-F1100DT/DS/D, IC-F2100DT/DS/D			~	~	~	<ul> <li>✓</li> </ul>			
IC-F52D-UL, IC-F62D-UL									
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR			~	~	~	~			
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR				~	~	<ul> <li>✓</li> </ul>			
IC-F200, IC-U20GM, IC-U20SR								~	~

	SPEA	KER-MICROPH	IONES		EARPH	HONE-MICROP	HONES		TIE-CLIP MICROPHONES
MODEL NAME	HM-186PI	HM-215	HM-228	HM-153LA	HM-166LA	HM-153LS	HM-166LS	HM-179PI	HM-238MC With SUB PTT button
	ø		\$			* <b>0</b>		20 .~0	6
IC-SAT100									
IP730D, IP740D									<ul> <li>✓</li> </ul>
IP501H, IP504H, IP503H		(Use with BC-218)				<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>		
IP110H	~		~					<ul> <li>✓</li> </ul>	
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S									
IC-F3400DT/DS, IC-F4400DT/DS									
IC-F52D, IC-F62D									
IC-F1100DT/DS/D, IC-F2100DT/DS/D				~	~				
IC-F52D-UL, IC-F62D-UL									
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR				~	~				
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR									
IC-F200, IC-U20GM, IC-U20SR						<b>v</b>	<ul> <li>✓</li> </ul>		

	TIE-CLIP MICROPHONES				HEADSETS				PTT SWITCH CABLES
MODEL NAME	нм-163мС	HS-94 Earhook type with boom microphone	HS-94LWP Earhook type with waterproof connector	HS-95 Behind-the-head type	HS-95LWP Behind-the-head type with waterproof connector	HS-97 Throat microphone type	HS-102 Earphone type	VS-3 Bluetooth® headset	VS-4MC For manual PTT operation
IC-SAT100	~	✔ (Use with VS-5MC)		✔ (Use with VS-5MC)		(Use with VS-5MC)		~	
IP730D, IP740D	~	✔ (Use with VS-5MC)		✔ (Use with VS-5MC)		✔ (Use with VS-5MC)		~	
IP501H, IP504H, IP503H		(Use with OPC-2006LS or OPC-2328)		(Use with OPC-2006LS or OPC-2328)		(Use with OPC-2006LS or OPC-2328)	✔ (Use with OPC-2359)	~	
IP110H		✓* <sup>9</sup> (Use with OPC-2133)		✓* <sup>9</sup> (Use with OPC-2133)		✓*9 (Use with OPC-2133)		~	
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	✔*8	✓* <sup>10</sup> (Use with VS-4MC or VS-5MC)		✓ *10(Use with VS-4MC or VS-5MC)		✓* <sup>10</sup> (Use with VS-4MC or VS-5MC)		~	V*11 (Use with HS-94, HS-95 or HS-97)
IC-F3400DT/DS, IC-F4400DT/DS		✔ (Use with VS-4MC)		✔ (Use with VS-4MC)		(Use with VS-4MC)			✔ (Use with HS-94, HS-95 or HS-97)
IC-F52D, IC-F62D	<ul> <li>✓</li> </ul>	✔ (Use with VS-5MC)		✔ (Use with VS-5MC)		(Use with VS-5MC)		~	
IC-F1100DT/DS/D, IC-F2100DT/DS/D		V (Use with VS-4LA or OPC-2004LA)	~	V (Use with VS-4LA or OPC-2004LA)	<b>v</b>	✔ (Use with VS-4LA or OPC-2004LA)			
IC-F52D-UL, IC-F62D-UL									
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR		✔ (Use with VS-4LA or OPC-2004LA)	~	✔ (Use with VS-4LA or OPC-2004LA)	~	✔ (Use with VS-4LA or OPC-2004LA)			
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR		V (Use with VS-4LA or OPC-2004LA)		(Use with VS-4LA or OPC-2004LA)		(Use with VS-4LA or OPC-2004LA)			
IC-F200, IC-U20GM, IC-U20SR		<ul> <li>(Use with OPC-2328 or OPC-2006)</li> </ul>		<ul> <li>(Use with OPC-2328 or OPC-2006)</li> </ul>		<ul> <li>(Use with OPC-2328 or OPC-2006)</li> </ul>			

\*<sup>7</sup> Increased speaker-microphone volume depends on the combination of the transceiver and microphone. Ask your dealer for possible combination.
\*<sup>8</sup> For IC-F7040T/S only. \*<sup>9</sup> HS-94, HS-95 and HS-97 headsets are simplex mode operation only. \*<sup>10</sup> VS-4MC for IC-F7010/IC-F7020 series, VS-5MC for IC-F7040 series.

		PTT SWITC	HCABLES		PLUG	ADAPTER CA	BLES	EARPHONES		
MODEL NAME	VS-5MC For manual PTT, VOX operation	VS-4LA For manual PTT operation	OPC-2328 For manual PTT operation	OPC-2359	OPC-2004LA For VOX operation	OPC-2006LS For VOX operation	OPC-2133 For VOX operation	<b>EH-15B</b> 2.5 mm plug	<b>SP-26</b> 2.5 mm plug	
	0	0		6.5		$\bigcirc$		_ 0		
IC-SAT100	V (Use with HS-94, HS-95 or HS-97)							(Use with HM-163MC)	✔(Use with HM-163MC)	
IP730D, IP740D	V (Use with HS-94, HS-95 or HS-97)							(Use with HM-163MC or HM-238MC)	✔(Use with HM-163MC or HM-238MC)	
IP501H, IP504H, IP503H			V (Use with HS-94, HS-95 or HS-97)	V (Use with HS-102)		V (Use with HS-94, HS-95 or HS-97)				
IP110H							<ul> <li>(Use with HS-94, HS95 and HS-97)</li> </ul>			
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	✓*12 (Use with HS-94, HS-95 or HS-97)							✓* <sup>™</sup> (Use with HM-163MC)	✓* <sup>™</sup> (Use with HM-163MC)	
IC-F3400DT/DS, IC-F4400DT/DS										
IC-F52D, IC-F62D	V (Use with HS-94, HS-95 or HS-97)							(Use with HM-163MC)	✔ (Use with HM-163MC)	
IC-F1100DT/DS/D, IC-F2100DT/DS/D		<ul> <li>(Use with HS-94, HS-95 or HS-97)</li> </ul>			V (Use with HS-94, HS-95 or HS-97)					
IC-F52D-UL, IC-F62D-UL										
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR		V (Use with HS-94, HS-95 or HS-97)			V (Use with HS-94, HS-95 or HS-97)					
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR		V (Use with HS-94, HS-95 or HS-97)			V (Use with HS-94, HS-95 or HS-97)					
IC-F200, IC-U20GM, IC-U20SR			V (Use with HS-94, HS-95, HS-97)			V (Use with HS-94, HS-95, HS-97)				

			EARPH	IONES			ACC AD	APTERS	CHARGER BRACKET
MODEL NAME	SP-27 3.5 mm plug	SP-28 2.5 mm plug	SP-29 3.5 mm plug	SP-32 Tube earphone adapter	SP-40 3.5 mm plug	SP-16PIBW	AD-118 Allows you to use 6-pin Hirose plug accessories	AD-135 3.5 mm jack earphone adapter	МВ-130
IC-SAT100	✔ (Use with HM-222H or AD-135)	✔ (Use with HM-163MC)	✔(Use with HM-222H or AD-135)	V (Use with EH-15B)	✔(Use with HM-222H or AD-135)		V	<b>v</b>	
IP730D, IP740D	<b>V</b> (Use with HM-222H, HM-245T or AD-135)	V(Use with HM-163MC or HM-238MC)	(Use with HM-222H, HM-245T or AD-135)		Use with HM-222H, HM-245T or AD-135)			~	
IP501H, IP504H, IP503H									
IP110H						<ul> <li>✓</li> </ul>			
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	✓*12(Use with HM-222H or AD-135)	✓ <sup>*12</sup> (Use with HM-163MC)	*12(Use with HM-222H or AD-135)	✓*12 (Use with EH-15B)	✓*12(Use with HM-222H or AD-135)		<ul> <li>✓</li> </ul>	✓*12	
IC-F3400DT/DS, IC-F4400DT/DS							~		
IC-F52D, IC-F62D	✔ (Use with HM-222H or AD-135)	✔ (Use with HM-163MC)	(Use with HM-222H or AD-135)	V (Use with EH-15B)	✔(Use with HM-222H or AD-135)		<ul> <li>✓</li> </ul>	~	
IC-F1100DT/DS/D, IC-F2100DT/DS/D									(Use with BC-213)
IC-F52D-UL, IC-F62D-UL									
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR									✔ (Use with BC-213)
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR									V (Use with BC-193)
IC-F200, IC-U20GM, IC-U20SR									

	E	BELT HANGER	S	BELT	CLIPS	MOUNT BASE	BRACKET ADAPTOR	CARRYI	NG CASES
MODEL NAME	MB-96N Swivel type	MB-96F Fixed type	MB-96FL Long type	MB-135 MB-133 MB-127 MB-124 MB-94R MBB-1 MBB-3 MB-5 Alligator type (Photo shows MB-133)	MB-136 MB-93 Swivel type	MBF-1 For use with BC-218	MBA-7 For use with BC-218	LC-195*13	LC-191* <sup>13</sup>
IC-SAT100				V (Use MBB-5)					
IP730D, IP740D	~	~	~	V (Use MB-133)	V (Use MB-136)			~	
IP501H, IP504H, IP503H				V (Use MB-135)		(Use with MBA-7)	(Use with MBF-1)		
IP110H				(Use MBB-1)					
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	~	~	~	V (Use MB-133)	V (Use MB-136)				
IC-F3400DT/DS, IC-F4400DT/DS	~	~	~	V (Use MB-133)	V (Use MB-136)				
IC-F52D, IC-F62D	~	~	~	V (Use MBB-3)	V (Use MB-136)				
IC-F1100DT/DS/D, IC-F2100DT/DS/D				V (Use MB-133)					
IC-F52D-UL, IC-F62D-UL	~	~	~	V (Use MBB-3)	V (Use MB-136)				~
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR				V (Use MB-133)					
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR				V (Use MB-124)					
IC-F200, IC-U20GM, IC-U20SR				V (Use MB-127)					

<sup>\*10</sup> VS-4MC for IC-F7010/IC-F7020 series, VS-5MC for IC-F7040 series.<sup>\*11</sup> For IC-F7010/IC-F7020 series only <sup>\*12</sup> For IC-F7040T/S only.<sup>\*13</sup> Charging is possible while the case is attached.

: Not applicable

✓ : Applicable

		C	ARRYING CAS	ES		DOCKING STATION
MODEL NAME	LC-184*13	<b>LC-187*</b> <sup>13</sup> For use with BP-290	LC-188 For use with BP-290	LC-183*13 For use with BP-271	LC-185*13 For use with BP-272	BC-247*14 Charging cradle
IC-SAT100						v
IP730D, IP740D						
IP501H, IP504H, IP503H				<ul> <li>✓</li> </ul>	~	
IP110H						
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	~					
IC-F3400DT/DS, IC-F4400DT/DS	~					
IC-F52D, IC-F62D		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>			
IC-F1100DT/DS/D, IC-F2100DT/DS/D						
IC-F52D-UL, IC-F62D-UL						
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR						
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR						
IC-F200, IC-U20GM, IC-U20SR						

		AN	TENNAS			CUT AN	ITENNAS	HIGH GAIN ANTENNAS
MODEL NAME	FA-S81V 136–150 MHz FA-S82V 148–162 MHz FA-S83V160–174 MHz FA-S81U 380–430 MHz FA-S81U 380–430 MHz FA-S83U 470–520 MHz	FA-SC25V         136–150         MHz           FA-SC55V         150–174         MHz           FA-SC25U         150–174         MHz           FA-SC25U         150–174         MHz           FA-SC72U         130–470         MHz           FA-SC72U         430–470         MHz	FA-SC28V 148-162 MHz FA-SC29V 160-174 MHz	FA-SC01U 350-400 MHz FA-SC02U 330-380 MHz FA-SC03U 380-430 MHz	FA-S100U 760-870 MHz	FA-S67VC 136-174 MHz FA-S76UC 380-520 MHz	FA-SC61VC 136-174 MHz FA-SC61UC 380-520 MHz	FA-SC62V 150–160 MHz FA-SC63V 155–165 MHz
IC-SAT100								
IP730D, IP740D		<ul> <li>✓</li> </ul>	~	~			~	<ul> <li>✓</li> </ul>
IP501H, IP504H, IP503H								
IP110H								
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	~				~	~		
IC-F3400DT/DS, IC-F4400DT/DS	~					~		
IC-F52D, IC-F62D		(Except FA-SC55V)	~	(Use FA-SC01U)			~	<ul> <li>✓</li> </ul>
IC-F1100DT/DS/D, IC-F2100DT/DS/D		<ul> <li>✓</li> </ul>	~	✔ (Use FA-SC01U or FA-SC02U)			<ul> <li>✓</li> </ul>	
IC-F52D-UL, IC-F62D-UL		(Except FA-SC55V)	~	(Use FA-SC01U)			~	<ul> <li>✓</li> </ul>
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR		<ul> <li>✓</li> </ul>	✔(Use FA-SC28V for IC-V10MR)	V (Use FA-SC02U)			~	<ul> <li>✓</li> </ul>
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR		<ul> <li>✓</li> </ul>	✔(Use FA-SC28V for IC-V3MR)	✔ (Use FA-SC01U or FA-SC03U)			~	<ul> <li>✓</li> </ul>
IC-F200, IC-U20GM, IC-U20SR								

	STUBBY A	NTENNAS			SATELLITE +	SATELLITE + GPS ANTENNAS			
MODEL NAME	FA-S81VS 136–150 MHz FA-S82VS 148–162 MHz FA-S83VS 160–174 MHz FA-S81US 400–450 MHz FA-S81US 400–450 MHz	FA-SC26VS 136–144 MHz FA-SC27VS 142–150 MHz FA-SC56VS 150–162 MHz FA-SC57VS 160–174 MHz FA-SC73US 450–490 MHz	Quick release connecter	FA-S102U	AH-38 OPC-2113 or user supplied coaxial cable required.	AH-40 1.5 m; 16.4 ft cable length	AH-41* <sup>15</sup> OPC-2462 or user supplied coaxial cable required.		
IC-SAT100			~	~	~	~	V		
IP730D, IP740D		<ul> <li>✓</li> </ul>							
IP501H, IP504H, IP503H									
IP110H									
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	<b>v</b>								
IC-F3400DT/DS, IC-F4400DT/DS	~								
IC-F52D, IC-F62D		<ul> <li>✓</li> </ul>							
IC-F1100DT/DS/D, IC-F2100DT/DS/D		<ul> <li>✓</li> </ul>							
IC-F52D-UL, IC-F62D-UL		~							
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR		<ul> <li>✓</li> </ul>							
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR		~							
IC-F200, IC-U20GM, IC-U20SR									

<sup>+13</sup> Charging is possible while the case is attached. <sup>+14</sup> Comes with DC power cable, AC adapter and adapter cable (DC to AC). <sup>+15</sup> Supplied with 1.5 m, 4.9 ft coaxial cable, power box, AC adapter and mounting kit.

	CC	DAXIAL CABL	ES	ZONE COP	Y CABLES	APPLIC	CATIONS	SPEAKERPHONE UNIT	PROGRAMMING SOFTWARE
MODEL NAME	<b>OPC-2422</b> For AH-40(5 m; 16.4 ft)	<b>OPC-2462</b> For AH-41 (59 m; 193.5 ft)	<b>OPC-2113</b> For AH-38 (10 m, 32.8 ft)	OPC-1870 Handheld to handheld	OPC-2362 Handheld to mobile	RS-SAT100 For Android <sup>™</sup> For iOS <sup>™</sup>	IP500APP LTE radio mobile application* <sup>16</sup>	VE-SP1	CS-V10MR CS-V3MR For Windows™
	Ó	O	Ø		$\square$		0	(IP radio is not supplied.)	
IC-SAT100	~	~	~			~			
IP730D, IP740D							<b>v</b>		
IP501H, IP504H, IP503H							<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	
IP110H									
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S				~	~				
IC-F3400DT/DS, IC-F4400DT/DS				~	~				
IC-F52D, IC-F62D				<ul> <li>✓</li> </ul>					
IC-F1100DT/DS/D, IC-F2100DT/DS/D									
IC-F52D-UL, IC-F62D-UL				~					
IC-F1000/T/S, IC-F2000/T/S, IC-V10MR									Use CS-V10MR for IC-V10MR)
IC-F3001, IC-F3003 IC-F4001, IC-F4003, IC-V3MR									✔ (Use CS-V3MR for IC-V3MR)
IC-F200, IC-U20GM, IC-U20SR									

\*\*6 For iOSTM: iOSTM version 12 or later. For AndroidTM: AndroidTM version 8.0 or later This service may not be available depending on the country/region.

### **Optional Accessories for Mobile Radios**

				HAN	D MICROPHO	ONES				SPEAKER-MICROPHONE
MODEL NAME	HM-239T with DTMF keypad	HM-220 Heavy-duty type	HM-220T Heavy-duty type with DTMF (Pp54)	HM-221	HM-221T DTMF keypad type	HM-152	HM-152T DTMF keypad type	HM-148G Heavy-duty type	HM-148T Heavy-duty type with DTMF keypad	HM-241
IC-SAT100M										
IP501M										~
IC-F7510, IC-F7520, IC-F7540		~	~	~	~					
IC-F5400D, IC-F6400D		~	~	~	~					
IC-F5330D, IC-F6330D										
IC-F5130D, IC-F6130D	~					~	~	~	~	
IC-F5021, IC-F5023/H IC-F6021, IC-F6023/H						~	~	~	~	
IC-F5011, IC-F5013/H IC-F6011, IC-F6013/H						~	~	<ul> <li>✓</li> </ul>	~	

	HANDS FREE MICROPHONE	EXTENSION CABLE	HEADSET	DESKTOP MI	CROPHONES	EXTERNAL	SPEAKERS	SEPARAT	ION KITS
MODEL NAME	HM-249	OPC-2500 Extension cable for HM-249	VS-3 Bluetooth® headset	5M-29	SM-26	SP-30	SP-35 With 2 m; 6.5 ft cable SP-35L With 6 m; 19.7 ft cable	RMK-5	RMK-7 Dual-head
IC-SAT100M			~			~	~		
IP501M	V	✔(Use with HM-249)	~			~	~		
IC-F7510, IC-F7520, IC-F7540			~	~		~	~	<ul> <li>(Separation cable is required)</li> </ul>	<ul> <li>(Separation cable is required)</li> </ul>
IC-F5400D, IC-F6400D				~		~	~	<ul> <li>(Separation cable is required)</li> </ul>	<ul> <li>(Separation cable is required)</li> </ul>
IC-F5330D, IC-F6330D			~			~	~		
IC-F5130D, IC-F6130D	V	✔(Use with HM-249)	✔(Use with UT-137A)		<ul> <li>✓</li> </ul>	~	~		
IC-F5021, IC-F5023/H IC-F6021, IC-F6023/H	V	✔(Use with HM-249)			~		~		
IC-F5011, IC-F5013/H IC-F6011, IC-F6013/H	V	✔(Use with HM-249)			<ul> <li>✓</li> </ul>	~	~		

# **Optional Accessories for Mobile Radios**

	СОММА	NDMIC™	SEPARATIC	ON CABLES	<b>GPS ANTENNA</b>	BLUETOOTH <sup>®</sup> UNIT	ACC C	ABLES
MODEL NAME	HM-218 Secondary controller for use with RMK-5 P55	НМ-230НВ	OPC-2367 8 m; 26.2 ft OPC-2366 5 m; 16.4 ft OPC-2365 3 m; 9.8 ft OPC-2364 1.9 m; 6.2 ft	OPC-2373 1.9 m; 6.2 ft OPC-2374 8 m; 26.2 ft	UX-241 5 m; 16.4 ft cable length	UT-137A	OPC-1939 D-SUB 15-pin type	OPC-2078 D-SUB 25-pin type
IC-SAT100M								
IP501M		~						
IC-F7510, IC-F7520, IC-F7540	<ul> <li>(Separation cable is required)</li> </ul>		✔ (Use with RMK-5 or RMK-7)	✔ (Use with HM-218)	<b>v</b>			
IC-F5400D, IC-F6400D	<ul> <li>(Separation cable is required)</li> </ul>		✔ (Use with RMK-5 or RMK-7)	✔ (Use with HM-218)	~			
IC-F5330D, IC-F6330D							✓* <sup>18</sup>	✓*18
IC-F5130D, IC-F6130D						~	✓*18	✓*18
IC-F5021, IC-F5023/H IC-F6021, IC-F6023/H							~	~
IC-F5011, IC-F5013/H IC-F6011, IC-F6013/H							~	<b>~</b>

	ACC CABLES	ZONE COPY CABLES	MICROPHO	NE CABLES	SAT ANTENNA	COAXIAL CABLE	AC ADAPTER	APPLICATION	DC POWER CABLES
MODEL NAME	<b>OPC-2407</b> D-SUB 25-pin type	OPC-2362 Mobile to handheld	<b>OPC-2355</b> 2.5 m; 8.2 ft cable length	<b>OPC-2429</b> For use with the supplied speaker microphone (2 m,6.5 ft)	AH-40 Satellite + GPS antenna (1.5 m; 16.4 ft cable)	OPC-2422 For AH-40 (5 m; 16.4 ft)	<b>BC-157S</b> 12 V/7.5 A	RS-SAT100 For Android™ For iOS™	<b>OPC-2479</b> 3 m, 10 A (for 25 W) <b>OPC-2478</b> 3 m, 20 A (for 50 W)
			<b>?</b>	Q	Ø	Q	A.		
IC-SAT100M				~	~	~	~	~	
IP501M	<ul> <li>✓</li> </ul>		✔ (Use with HM-230HB or HM-241)						
IC-F7510, IC-F7520, IC-F7540		~							
IC-F5400D, IC-F6400D		~							
IC-F5330D, IC-F6330D									~
IC-F5130D, IC-F6130D									~
IC-F5021, IC-F5023/H IC-F6021, IC-F6023/H									
IC-F5011, IC-F5013/H IC-F6011, IC-F6013/H									

 $^{\star_{18}}$  Digital modulation input is not available even when using accessory cables.

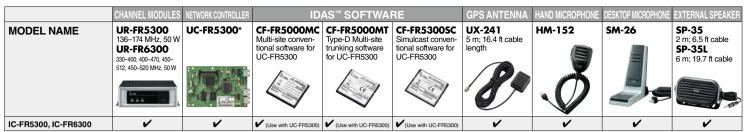
### Activation Keys for Handheld and Mobile Radios

		ACTIVATION KEYS										
MODEL NAME	ISL-P25TR APCO P25 Trunking Phase 1	ISL-P25P2 APCO P25 Trunking Phase 2	ISL-P25AES AES Encryption Activation Key	ISL-P25ARC4 40-bit Software Encryption	ISL-P25VS APCO P25 Conventional Voting Scan	APCO P25 Packet	ISL-P25FP Front Panel Programming	ISL-P25W 25 kHz Activation Key (for USA version transceivers)				
IC-F7010T/S, IC-F7020T/S, IC-F7040T/S	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	(Use with UT-134)	✓.	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	~	<b>v</b>				
IC-F7510, IC-F7520, IC-F7540	<b>v</b>	<ul> <li>✓</li> </ul>	(Use with UT-134)	V.	<ul> <li>✓</li> </ul>	~	~	~				

	ACTIVATION KEYS									
MODEL NAME	ISL-UGMTR NXDN™ Type-D Trunking Upgrade Key	ISL-AKAES AES Encryption Activation Key	<b>ISL-CHEX</b> Channel Expan- sion Key increases channel number up to 4000	ISL-AKSTM Dealer Set Mode Activation Key	ISL-AK25K 25 kHz Activation Key (for USA ver- sion transceivers)					
IC-F3400DT/DS, IC-F4400DT/DS	~	(Use with UT-134)	<ul> <li>✓</li> </ul>	~	<ul> <li>✓</li> </ul>					
IC-F52D, IC-F62D	~				<ul> <li>✓</li> </ul>					
IC-F52D-UL, IC-F62D-UL	~				<ul> <li>✓</li> </ul>					
IC-F5400D, IC-F6400D	~	V (Use with UT-134)	<ul> <li>✓</li> </ul>	~	~					

\*ISL-P25AES and UT-125 or UT-134 required

### **Optional Accessories for Repeaters**



\* The following versions are available. #11: CF card not included (Type-D single-site trunking) #12: CF-FR5000MC included #13: CF-FR5000MT included #14: CF-FR5300SC included

### **Optional Accessories for RoIP Gateway and IP Products**

		AC ADAPTERS			AUDIO CONNECTION CABLES						
MODEL NAME	BC-2075 12 V/4.2 A	BC-236 12 V/8.3 A	BC-1475*1 12 V/0.25 A	OPC-2273 For VHF marine transceiver 5 m; 16.4 ft	<b>OPC-2390</b> For IC-FR5000 series 5 m; 16.4 ft	OPC-2275 For mobile trans- ceiver 5 m; 16.4 ft	<b>OPC-2276</b> For HM-152 or SM-26 5 m; 16.4 ft	OPC-2389 For RS-232 serial connection 5 m; 16.4 ft	OPC-2412 For IC-SAT100 5 m; 16.4 ft		
VE-PG4		~		~	~	~	~	~	~		
IP100FS			(Use with CT-23)								
RC-FS10			(Use with CT-23)								
IP1100CV	<b>v</b>	~									

	SPEAKER-MICROPHONE	HAN	D MICROPHO	NES	DESKTOP MICROPHONE	DIGITAL VOICE CONVERTER	MICROPHONE ADAPTER	MOUNTING BRACKET
MODEL NAME	нм-241	HM-152	HM-152T DTMF keypad type	HM-216 Short cable*3	5M-26	CT-24 For more than five digital radio connections	CT-23	MBF-6
VE-PG4	~	<b>✓</b> *2	<b>✓</b> *2	✓*2	✓*2	~		<ul> <li>✓</li> </ul>
IP100FS		✔ (Use with CT-23 and BC-147S)			✔ (Use with CT-23 and BC-147S)		V (Use with SM-26 or HM-152)	
RC-FS10		V (Use with CT-23 and BC-147S)			✔ (Use with CT-23 and BC-147S)		(Use with SM-26 or HM-152)	
IP1100CV								✓

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

<sup>2</sup><sup>2</sup> 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 accessories.

<sup>+3</sup> 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.

### **Optional Accessories for HF Radio**



MODEL NAME	UX-248 Can be used with Enhanced version.	OPC-2308	AT-140	OPC-2309 10 m; 32.8 ft		CFU-F8100
IC-F8101	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	V (Use with AT-140)	<b>v</b>	<ul> <li>✓</li> </ul>

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

Read all instructions enclosed with the transceiver carefully and completely before using the transceiver.

: Applicable

# **Global Wireless Communications Company**

Icom Inc., launched over 60 years ago as an amateur radio manufacturing company is now a global wireless communications company that provides the world with the most comprehensive range of radio solutions for land, sea and air.

Icom and the Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand and/or other countries. IDAS, SIMULTANEOUS TALKLISTEN, AQUAQUAKE and COMMANDMIC are registered trademarks or trademarks of lcom Incorporated. NXDN is a trademark of Icom Incorporated and JVC KENWOOD Corporation. dPMR is a trademark of the dPMR MoU Association. AMBE+2 is a trademark and property of Digital Voice Systems Inc. Windows is a trademark of the Microsoft group of companies. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Icom Inc. is under licence. Iridium, and the Iridium connected logo are trademarks and registered trademarks of Iridium Satellite LLC. IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license. Android is a trademark of Google LLC. USB TYPE-C is a trademark of USB Implementers Forum Inc. All other trademarks are the properties of their respective holders. Bluetooth connection has not been tested for all Bluetooth® compatible devices with this product. This does not guarantee that all devices will work with this product.

1-1-32, Kamiminami, Hirano-Ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013

Icom America Inc.

Icom Inc.

Icom (Europe) GmbH www.icomamerica.com www.icomeurope.com

Icom Canada www.icomcanada.com

Icom Brazil E-mail: sales@icombrazil.com

> Icom France s.a.s. www.icom-france.com

Icom Spain S.L.

www.icomspain.com

Icom (UK) Ltd.

www.icomuk.co.uk

Icom (Australia) Pty. Ltd. www.icom.net.au

Icom Asia Co., Ltd. www.icomasia.com

www.icomjapan.com

Your local distributor/dealer:

FELLECS LECH Ihr Partner für Funktechnik www.fellecs-tech.com inbox@fellecs-tech.com

LT 23BGZ535A