BUSINESS RADIO SOLUTIONS



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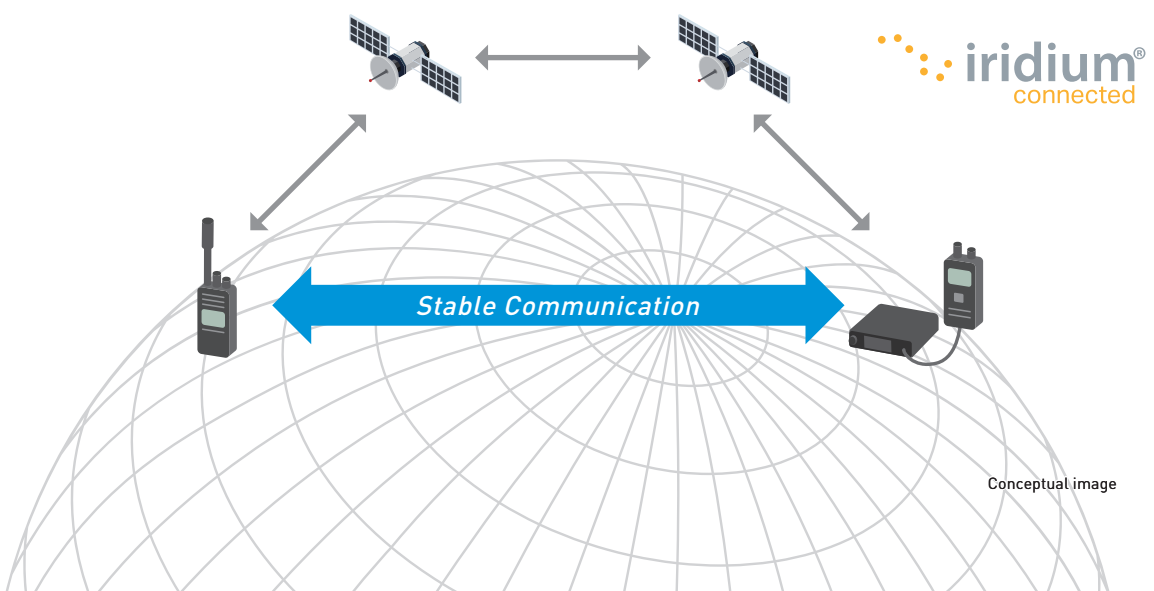
SATELLITE / IP SOLUTIONS





Real-Time Communications Across the Globe

SATELLITE PTT (Push-To-Talk) is a transceiver that uses the Iridium® satellite network. It can be used as a communication device in remote, isolated areas 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.



Conceptual image

Satellite PTT

IC-SAT100



Compact Handheld Satellite PTT Radio

- Emergency key for calling programmed users
- Integrated GPS receiver shows received signal position
- IP67 and MIL-STD-810G rugged construction
- 1500 mW of powerful audio
- 14.5 hours of long operating time*1
- Built-in Bluetooth® capability*2
- AES 256-bit encryption for security

Satellite PTT

IC-SAT100M

Satellite PTT Radio In-Building

- Emergency key for calling programmed users
- Integrated GPS receiver shows received signal position
- Supplied 1500 mW speaker-microphone
- Built-in Bluetooth® capability*2
- AES 256-bit encryption for security
- Optional pole mount passive antenna AH-38, max. 169 m installation
- Environmentally reinforced antenna with enhanced water resistance and saltwater durability*3



Antenna Unit

*1 TX : RX : standby = 5 : 5 : 90. *2 Version without Bluetooth® capability also available. Ask your dealer for details. *3 Depending on version.

Please Note: 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. The IC-SAT100M is primarily designed for base station use. Additional environmental protection is expected for use outside the scope.

Functions / Specifications	IC-SAT100	IC-SAT100M
Frequency Range	1616–1626.5 MHz	1616–1626.5 MHz
Talkgroups	15 (Max.)	15 (Max.)
Dimensions (W×H×D: Projections are not included)	57.8 × 135 × 32.8 mm	Antenna unit (with RF unit): 76.8 × 200 × 76.8 mm, Main unit: 125 × 29 × 156.5 mm, Microphone: 59.5 × 134.6 × 30.1 mm
Weight (approximate)	360 g	Antenna unit (with RF unit): 600 g, Main unit with microphone: 1.2 kg
IP Rating / Military Standard	IP67 / MIL-STD-810G	IP67 (Antenna unit (with RF unit)), IP55 (mic), IP54 (main unit) / MIL-STD-810G
Operating Time (Hours)	14.5	
Display	●	●
Keypad	Limited	Limited
AF Output Power (Internal SP)	1500 mW typical	1500 mW typical
Encryption AES	●	●
Vibration Alert	●	
Voice Recorder	●	●
Bluetooth® Capability	●	●
GPS Receiver	●	●
Short Data Message	●	●
Emergency Call	●	●
PoE Capability		●
I/O Control Port	USB, 14-PIN ACC	D-SUB, LAN, Ignition sense



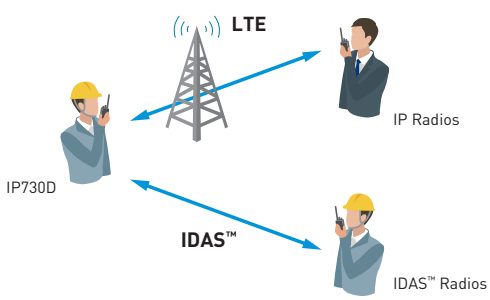
Innovative IP Radios with Licensed Professional Radio Mode

The IP730D and IP740D are dual mode "Hybrid" radios that provide nationwide coverage over LTE networks and conventional VHF/UHF professional radio mode (IDAS™ digital/analogue mode). It receives both communication modes and transmits either or both modes.

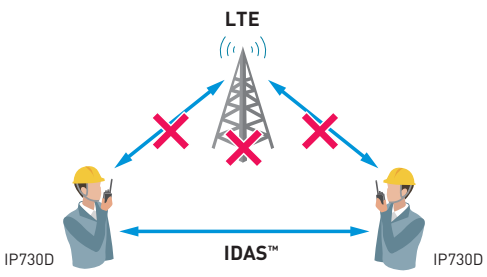
Dual Mode Operation with Main and Sub PTT Buttons

The IP730D series has a Sub PTT button, in addition to the Main PTT button. It provides smooth dual mode operation with independent PTT buttons for each LTE mode and IDAS™ mode.

Expand an existing IDAS™ system with an LTE network



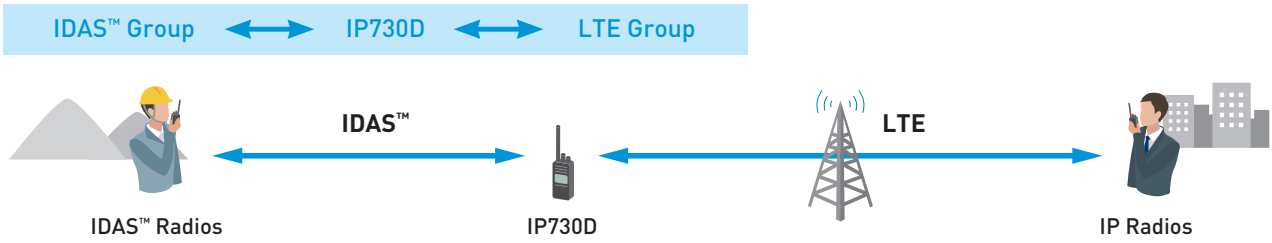
Communication redundancy, when network congestion occurs or network service is temporarily unavailable



The Bridge Function*

The Bridge function* is an innovative feature that allows handheld radio users to achieve an audio bridge between the LTE mode and IDAS™ mode easily.

* 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.





Hybrid IP Transceivers

IP730D/IP740D

Hybrid Handheld IP Radio for Local & Nationwide Communications

- Simultaneous TalkListen™ in LTE Mode
- 1500 mW of powerful audio*1
- IP67 / MIL-STD-810G
- 24 hours of long lasting battery life*2
- Emergency Call, Lone Worker and Man Down functions
- Built-in Bluetooth® capability
- GPS Data Transmission capability in LTE mode

NXDN™ LTE X IDAS Talk Listen™ Simultaneous

Functions / Specifications		IP730D/IP740D
Network (EUR/EXP Versions)	4G LTE	B1, B3, B7, B8, B20
	3G	B1, B8
Dimensions (W × H × D: Projections are not included)		61.7 × 140.5 × 42.8 mm
Weight (approximate)		320 g
IP Rating / Military Standard		IP67 / MIL-STD-810G
Operating Time (Hours)		24 (LTE mode) 13 (IDAS™ mode)
Display		●
Keypad		Limited
AF Output Power (Internal SP)		1500 mW typical (10% distortion)
Simultaneous TalkListen™		●
Man Down		●
Lone Worker		●
Vibration Alert		●
Voice Recorder		●
Bluetooth® Capability		●
GPS Receiver		●
Short Data Message		● (LTE mode)
Emergency Call		●
Provisioning/FOTA (Firmware Over-the-Air)		● (LTE mode)

*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.



Area Coverage Over a 4G LTE Network*1

Simultaneous TalkListen™

The Simultaneous TalkListen™ provides full-duplex one-to-many communication, which allows users to talk and receive at the same time.
This results in a smooth, telephone-like conversations.

Multiple-user Communication

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

Priority Interrupt Calling

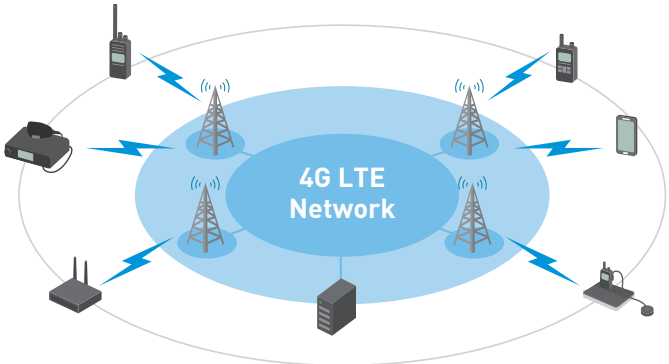
Our IP radios support group calls with three or more people. In case of an emergency, you can break into an on-going call to transmit an important message.

Secure, Closed-Network Reliability*2

The system server is placed within a secured closed network, and shielded from potential attacks. Its operation relies on a custom SIM that is isolated from the Internet, making it more reliable than regular PoC systems that use the Internet.

Carrier Flexibility with a Standard Data SIM (IP503H Lite)

The IP503H Lite uses a generally available data SIM card, working with any network carrier. Dual SIM capability enables quick carrier switching, maintaining reliable communication if one network has issues.



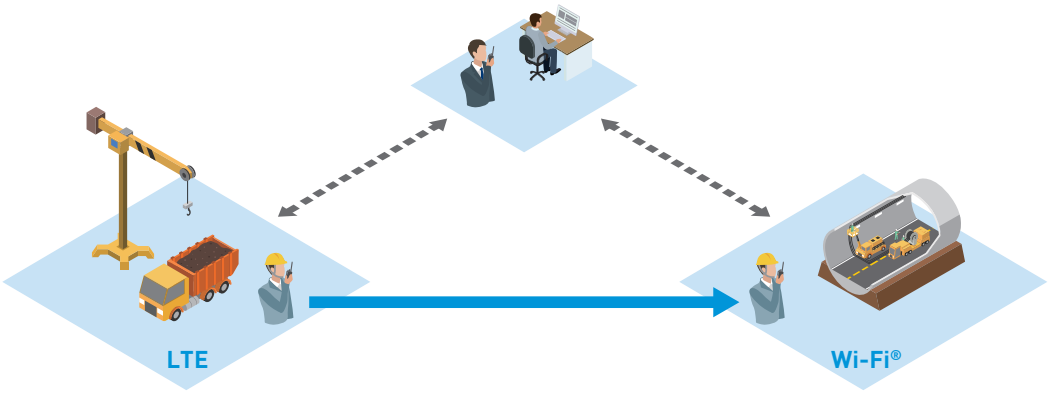
*1 Network coverage provided by a custom SIM card. Service availability depends on the country.
*2 IP503H, IP510H, IP501M only. IP503H Lite uses a standard data SIM over the public network.

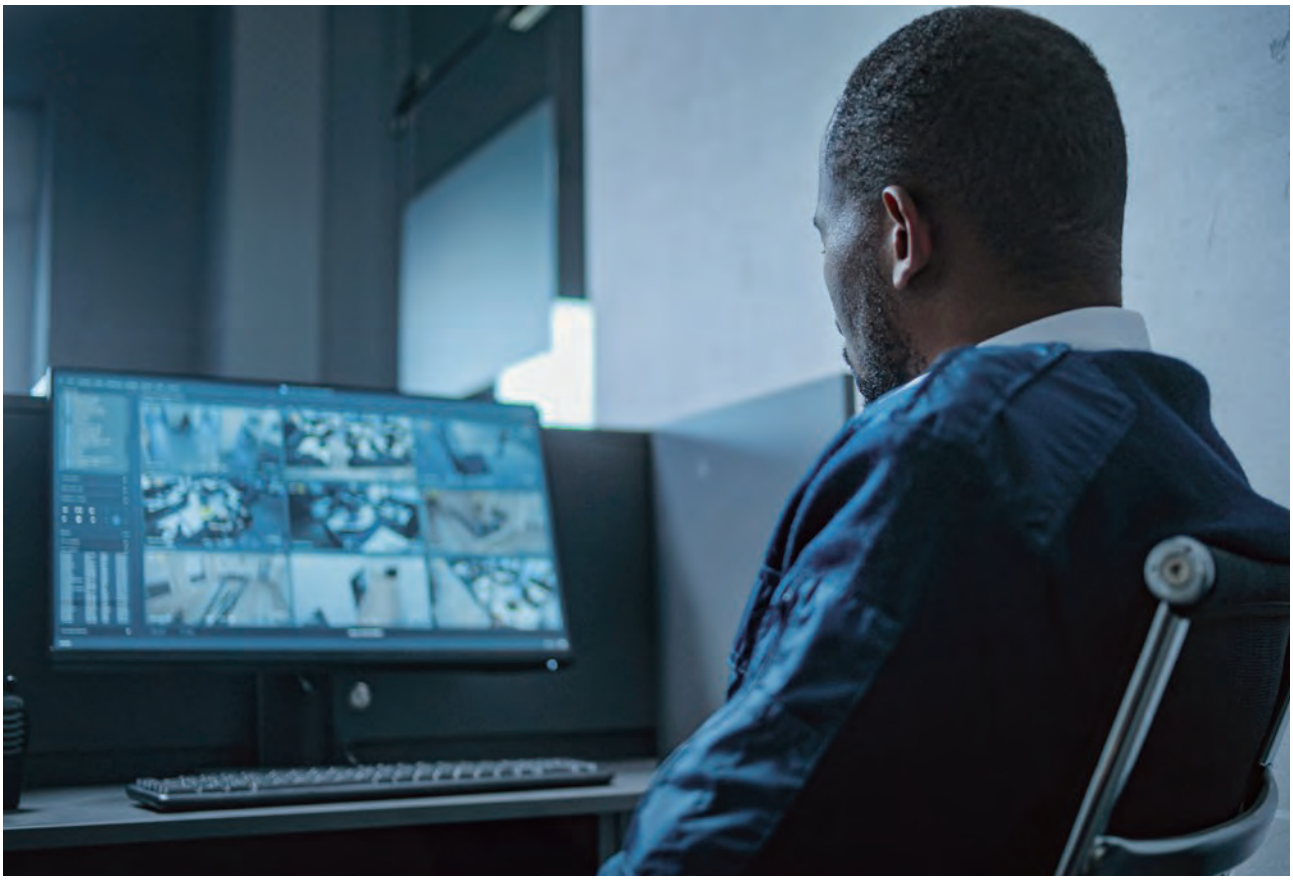
Dual Mode IP Transceiver That Communicates via Both 4G LTE and Wi-Fi®

The IP510H is a dual mode IP transceiver that communicates via both 4G LTE and Wi-Fi®. When outside LTE coverage, it automatically switches to a Wi-Fi connection without any user intervention, allowing seamless communication even in areas where one network isn't available.

The IP510H also supports full-duplex communication, meaning users can simultaneously talk and listen and interrupt a conversation if needed, just like a phone call. It's ideal for industries like transportation, infrastructure, and security, where stable communication is critical, as well as for traditional IP transceiver applications. Furthermore, with Bluetooth® capability for cable-free operation, it enhances work efficiency.

The IP510H is also more compact and lightweight than our previous IP transceivers.





IP Transceiver

IP510H



Dual mode IP transceiver, LTE and Wi-Fi®

- Wi-Fi standards IEEE802.11 ac/n/g/b/a
- Supports WPA3™ Enterprise/ Personal Wi-Fi security
- Automatic switching between LTE and Wi-Fi®
- AI Noise Cancelling with real-time deep-learning audio analysis
- Support for registering IP510H to the controller server through Wi-Fi access
- USB Type-C™ charging, battery can be replaced without turning OFF the power
- IP67 / MIL-STD-810G

Talk Listen™ Simultaneous

IP Transceivers

IP503H
IP503H Lite



IP503H



IP503H Lite

Compact and Durable IP Handheld

- 900 mW loud high quality vocoder audio
- IP67 / MIL-STD-810G
- Emergency Call, Lone Worker and Man Down functions
- Voice Record/Playback functions
- Vibration Alert function notifies of incoming calls
- Built-in Bluetooth® capability and GPS
- The IP503H Lite can be used with a generally sold data SIM card

* The IP503H Lite uses a generally available data SIM card and is controlled by the IP4000C system. The IP503H Lite is not compatible with IP503H radios which use a closed network provided by custom Icom SIM card.

IP503H

IP503H Lite

Talk Listen™ Simultaneous

IP Transceiver

IP501M

Mobile IP Radio Interoperable with IP Handhelds

- Built-in Bluetooth® capability 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



Talk Listen™ Simultaneous

Functions / Specifications		IP510H	IP503H	IP503H Lite	IP501M
Network (EUR/EXP Versions)	4G LTE	B1, B3, B7, B8, B20, B28	B1, B3, B7, B8, B20	EUR: B1, B3, B7, B8, B20, AUS: B1, B3, B5, B7, B8, B28	B1, B3, B7, B8, B20
	3G	B1, B8	B1, B8	EUR: B1, B8, AUS: B1, B5	B1, B8
Dimensions (W × H × D: Projections are not included)		56 × 92.3 × 31.2 mm	59 × 95 × 32 mm	59 × 95 × 32 mm	125 × 29 × 156 mm
Weight (approximate)		220 g	240 g	240 g	840 g
IP Rating / Military Standard		IP67 / MIL-STD-810G	IP67 / MIL-STD-810G	IP67 / MIL-STD-810G	IP54 / MIL-STD-810G
Operating Time (Hours)		18 (LTE mode)/36 (Wi-Fi mode) with BP-314 26 (LTE mode)/58 (Wi-Fi mode) with BP-315	17	17	
Display		●	●	●	●
Keypad		Limited	Limited	Limited	Limited
AF Output Power (Internal SP)		1000 mW	900 mW	900 mW	4 W (External SP)
Simultaneous TalkListen™		●	●	●	●
Man Down		●	●	●	
Lone Worker		●	●	●	●
Vibration Alert		●	●	●	
Voice Recorder		●	●	●	
Bluetooth® Capability		●	●	●	●
GPS Receiver		●	●	●	●
Short Data Message		●	●	●	●
Emergency Call		●	●	●	●
Provisioning/FOTA (Firmware Over-the-Air)		●	●	●	●

Speakerphone Unit

VE-SP1

Conference Call Speaker

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



IP Transceiver APP

IP500APP

*Android™/iOS™ Application to Communicate with IP Radios**

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

* IP500APP for Android™: Android™ version 8.0 or later. IP500APP for iOS™: iOS™ version 12 or later.





Simultaneous TalkListen™ That Works Over Wi-Fi®

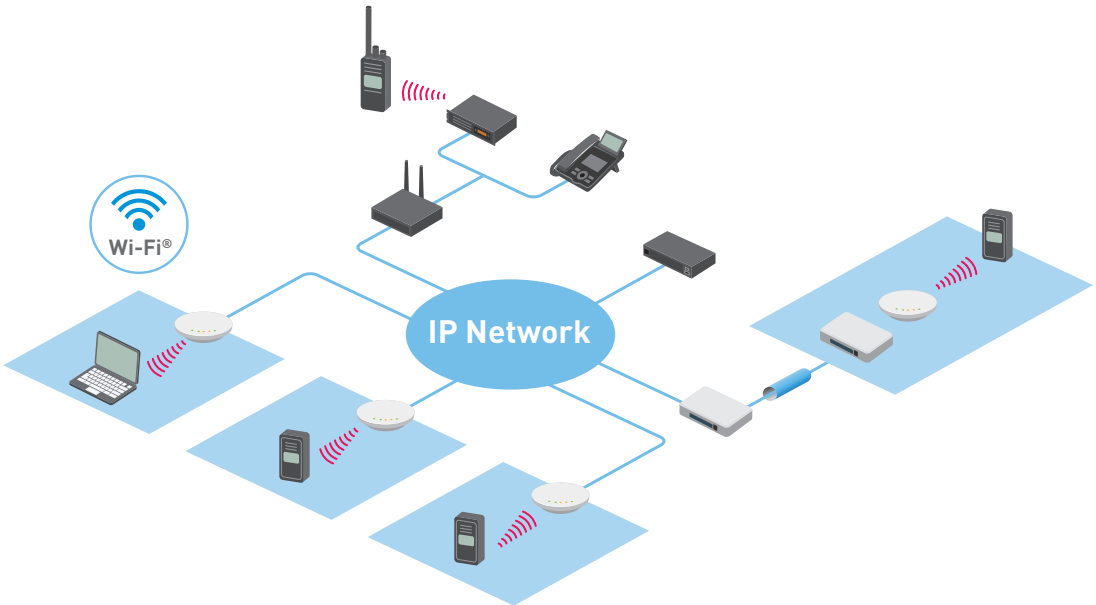
Communication System Using Wi-Fi®

By deploying access points across an existing IP network, the Wi-Fi radio system allows you to communicate from anywhere within coverage range. The IP110H can access the nearest access point, and roam between them.

Individual, Group, All or Area Communication

The IP110H enables staff to communicate across multiple rooms and exchange short data messages* with vibration alerts. RC-FS20 software allows dispatch and communication from a Windows™ PC.

* Send preprogrammed message from the IP110H.



Wi-Fi Transceiver

IP110H

Compact Wi-Fi Radio

- Licence-free communication terminal
- WPA2™, WPA-Enterprise security
- Built-in Bluetooth® capability
- IP67 / IP54 and MIL-STD-810G
- Compact body and lightweight
- 1000 mW audio output
- Motion/Stationary Detection, Man Down and Lone Worker functions

Talk Listen™ Simultaneous



Wi-Fi Transceiver Controller

IP1100CV

Wi-Fi Transceiver Controller

- Capable of controlling up to 300 units Wi-Fi radios and software clients
- 2.5 Gbps WAN Port and VPN Router Function
- Up to 500 call addresses for individual and group calls.
- Call recording function can record communication audio to an external USB flash drive



Functions / Specifications	IP110H
Network (EUR/EXP Versions)	Wi-Fi®: 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: Projections are not included)	57 × 96.9 × 25.1 mm
Weight (approximate)	146 g
IP Rating / Military Standard	IP67 / IP54 / MIL-STD-810G
Operating Time (Hours)	20
Display	●
Keypad	Limited
AF Output Power (Internal SP)	1000 mW
Simultaneous TalkListen™	●
Man Down	●
Lone Worker	●
Vibration Alert	●
Voice Recorder	●
Bluetooth® Capability	●
GPS Receiver	
Short Data Message	●
Emergency Call	●
Provisioning/FOTA (Firmware Over-the-Air)	●

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





Unified Dispatch & Connectivity Solution

One Network. One View. Total Control.

Icom's software and hardware work together to support your communications. You can deploy each on its own or combine them to seamlessly connect the field and the control room as a unified operational solution.

Key Benefits

- Unify multiple sites and communication types into a single dispatch view.
- Improve operational efficiency and safety for large facilities and multi-site organizations.
- Combine multiple communication methods to ensure communication continuity, even when LTE is unavailable or during large-scale disasters.
- Supports interoperability with external organizations using different radio systems, such as police and fire services*.

* Depends on radio system configuration and may be subject to regional regulations.

NEW

Dispatcher Software

RC-FS20

Integrated Dispatch and Radio Management System

- Controls IDAS™ (NXDN™ and dPMR™ Mode 2) and Wi-Fi radio systems directly
- Connects additional radio standards, including analogue, aviation, marine, LTE, P25, and satellite PTT, to the RC-FS20 through the VE-PG4
- Customizes the dispatcher switch layout for flexible operation
- The AVL function displays the location of up to 300 IDAS™ and LTE radios on a web-based OpenStreetMap display, with Google Maps™ available as an option
- Activation key available for time-limited trial of full RC-FS20 functionality



AVL display example



RoIP Gateway

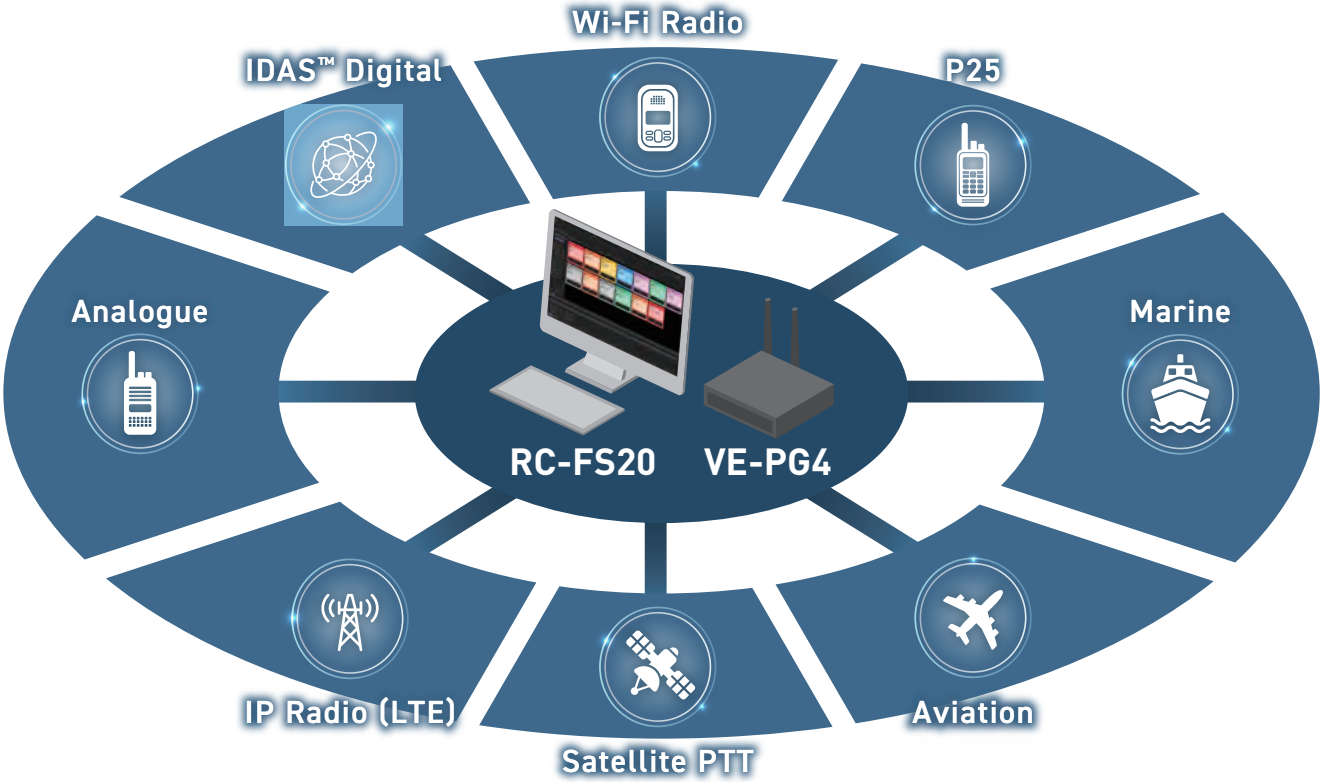
VE-PG4

Radio over IP network Gateway

- The VE-PG4 includes built-in RoIP, SIP gateway, IP router, IP PBX, and Wi-Fi radio controller functions, in one box, and connects LTE radios with other systems
- Connects IDAS™ (NXDN™ and dPMR™ Mode 2) repeaters through an IP network
- Records incoming and outgoing calls to an external USB drive
- Connects the optional HM-241 speaker-microphone to the front panel for simple base station operation



Communication Links



TWO WAY RADIO SOLUTIONS

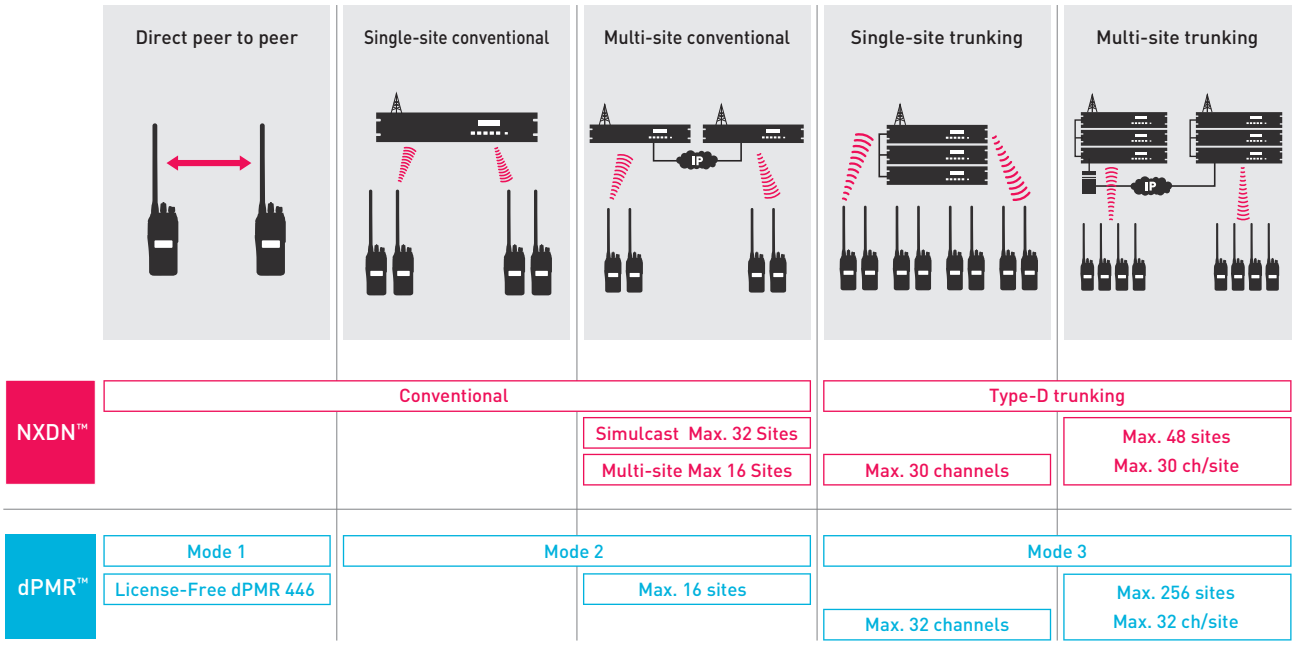
Flexible Analogue and Digital Solutions with Advanced IP Network Integration

NXDN™/dPMR™ Protocol Choice

The IDAS™ digital radio system has two protocol choices, NXDN™ or dPMR™. Both protocols are open digital radio standards using 6.25 kHz FDMA narrowband technology. With this flexible choice, the IDAS™ radio system enables for interoperability with other manufacturers equipment to add to/replace existing NXDN™ and/or dPMR™ systems. Some models support NXDN™ 12.5 kHz mode for compatibility with other manufacturers.

System Scalability According to Communication Traffic and Coverage

Depending on the communication traffic and coverage, an IDAS™ radio system can be expanded from single site conventional to simulcast conventional or multi-site trunking, to meet changing communication system requirement. One notable feature is that you don't have to use your own microwave or similar equipment because the requirement for the IP line in the backbone is flexible.

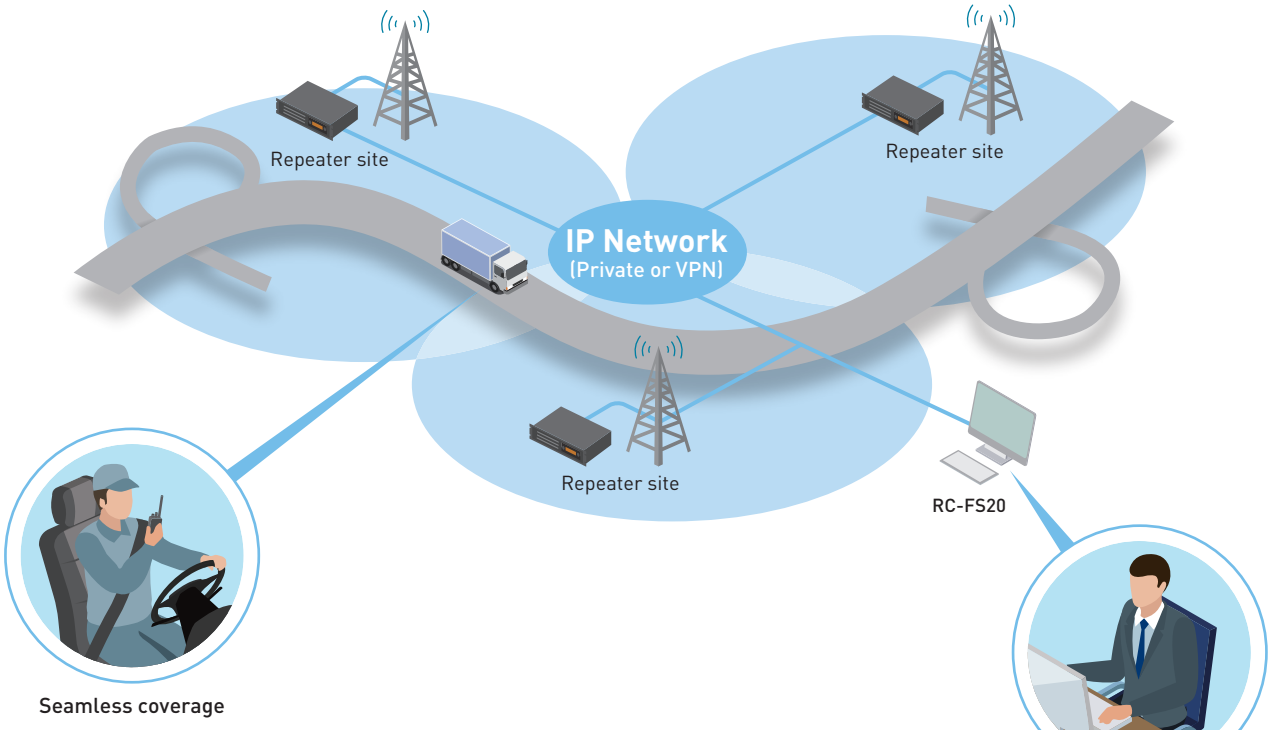


Wide Area Coverage on a Single Pair of Frequencies

The IDAS™ Simulcast (NXDN™ protocol) system links multiple repeater sites* through an IP network, synchronizing them with precise GPS signals. This enables a single pair of frequency licenses to cover a wider area. Even in urban areas where obtaining new frequency licenses is difficult, it's feasible to establish a multisite, wide-area system, keeping license costs lower. In certain situations, only the IDAS™ Simulcast system can fulfill specific requirements.

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

Simulcast Network System



Scan to see more details

Remote Monitoring and Dispatch

IDAS™ systems can be monitored and dispatched with the RC-FS20. See RoIP & Network (p.13–14) for details.

Ideal 6.25 kHz FDMA Technology for Simulcast

The IDAS™ Simulcast system transmits digital voice and data at 4800 bps using 4-Level FSK and 6.25 kHz very narrow bandwidth FDMA technology. With a symbol duration of about 420 microseconds (μs), the system experiences minimal Inter-Symbol Interference (ISI). Consequently, the IDAS™ Simulcast system boasts a delay spread tolerance of approximately 60 μs. In contrast, a DMR/P25 Phase 1 system has a delay spread tolerance of about 30 μs, leading to a reduction in coverage radius by a similar amount.



Simplified Setup and Flexible Adjustments

Compared to other simulcast systems, IDAS™ Simulcast can initially start with a more straightforward setup. If issues arise, adjustments to the overlap and range between repeaters can be made later on.

Any IDAS™ Radio Can Be Employed

No extra technical requirements are needed on the IDAS™ transceiver to utilize IDAS™ Simulcast. The transceiver can receive simulcast through the same process used for handling received multipath interference. Therefore, any IDAS™ transceiver can be employed for IDAS™ simulcast.

NEW

VHF and UHF Digital Transceivers

IC-F3600D/ F4600D Series



Flagship Excellence Next-Level Performance with Full NXDN™ Capability

- IP68 / MIL-STD-810G
- Crystal-clear 1.8" colour display supporting multiple languages
- Hands-Free Operation with Bluetooth® Headset*1
- Bluetooth® LE functionality supports beacon reception*2
- Powerful battery options for long-lasting performance, 13 hours with BP-303N
- Built-in GNSS receiver with multi-constellation support (GPS/GLONASS/Galileo/BDS/QZSS)
- Convenient USB Type-C™ charging
- OTAP (Over-the-Air Programming) function
- Active Noise Canceling function
- AES/DES encryption*3

NXDN™ | Conventional
Single/Multi-Site Trunking (Optional*3)

*1 Headset is required separately.
*2 Bluetooth® beacon is required separately.
*3 Licence key upgrade required

VHF and UHF Digital Transceivers

IC-F3400D/ F4400D Series



Advanced Excellence with Colour Display and Versatile Feature Set

- IP68 / MIL-STD-810G
- Colour LCD and Improved User Interface
- Integrated GPS
- Hands-free operation with Bluetooth® headset*1
- OTAP (Over-the-Air Programming) function easily reconfigures in-the-field radios
- Active Noise Canceling function
- AES/DES encryption*2

NXDN™ | Conventional
Single/Multi-Site Trunking (Optional*2)
dPMR™ | Mode 1 | Mode 2
Mode 3 (Optional*2)

*1 Headset is required separately.
*2 Licence key upgrade required

VHF and UHF Digital Transceivers

IC-F52D/F62D



Powerful and Compact, 5 W Model with Advanced Features

- IP67/66/55/54 / MIL-STD-810G
- Full dot matrix display for 14 characters with status icons
- Built-in Bluetooth® capability*1, Voice Recording, Active Noise Cancelling function
- Motion/Stationary Detection, Man Down and Lone Worker functions
- OTAP (Over-the-Air Programming) function easily reconfigures in-the-field radios
- Intelligent battery management helps to extend the battery life

NXDN™ | Conventional
Single/Multi-Site Trunking (Optional*2)
dPMR™ | Mode 1 | Mode 2
Mode 3 (Optional*2)

*1 Depending on version
*2 Licence key upgrade required

VHF and UHF Digital Transceivers

IC-F1100D/ F2100D Series



Budget-Friendly Handheld with Keypad and LCD Variations

- 128 channels (16 channels for IC-F1100D/F2100D)
- IP67 / MIL-STD-810G
- Motion/Stationary Detection, Man Down and Lone Worker functions
- Operating time of up to 18 hours in IC-F1100D series and 17 hours in IC-F2100D series with the supplied battery (BP-280)
- Over-the-Air Alias (OAA) function displays the caller's name without programming

NXDN™ | Conventional
Single-Site Trunking
dPMR™ | Mode 1 | Mode 2



VHF and UHF Digital Transceivers

IC-F5400D/F6400D Series

Flagship Excellence with Versatile Configuration and Colour Display

- IP55 / MIL-STD-810G
- Flexible configurations with detachable front panel
- Colour LCD and improved user interface
- Integrated GPS
- Hands-free operation with Bluetooth® headset*1
- OTAP (Over-the-Air Programming) function easily reconfigures in-the-field radios
- Active noise canceller
- AES/DES encryption*2

*1 Version without Bluetooth also available. Ask your Dealer for details. Available functions depend on paired Bluetooth® devices. Icom does not guarantee all functions and performance of the Bluetooth® headset. Headset is required separately.
*2 Licence key upgrade required

NXDN™ | Conventional | Single/Multi-Site Trunking (Optional*2)
dPMR™ | Mode 1 | Mode 2 | Mode 3 (Optional*2)



VHF and UHF Digital Transceivers

IC-F5330D/F6330D

CommandMic™ Remote Control with Ethernet Cable Connection

- NXDN™ Type-D single-site trunking
- Flexible Power over Ethernet (PoE) connection*1 between RF unit and CommandMic™
- High contrast, wide viewing angle, black background display
- Bluetooth® capability*2
- Emergency and Lone Worker functions
- Integration with the VE-PG4
- Optional D-SUB connector cable

*1 Up to 100 m Ethernet cable *2 Depending on version

NXDN™ | Conventional | Single-Site Trunking



VHF and UHF Digital Transceivers

IC-F5130D/F6130D

Digital Standard Mobile Transceiver

- NXDN™ Type-D single-site trunking
- High contrast, wide viewing angle, black background display
- Emergency and Lone Worker functions
- GPS receiver connection with optional ACC cable
- Bluetooth® capability with optional UT-137A
- Integration with the VE-PG4
- Optional D-SUB connector cable

NXDN™ | Conventional | Single-Site Trunking

IDAS™ Handheld Radios Feature Comparison

Functions / Specifications		IC-F3600D/IC-F4600D SERIES	IC-F3400D/IC-F4400D SERIES	IC-F52D IC-F62D	IC-F1100D/IC-F2100D SERIES		
		IC-F3600DT/DS IC-F4600DT/DS	IC-F3400DT/DS/DPT/DPS IC-F4400DT/DS/DPT/DPS	IC-F52D IC-F62D	IC-F1100DT IC-F2100DT	IC-F1100DS IC-F2100DS	IC-F1100D IC-F2100D
Frequency Range		136-174MHz	136–174 MHz	136–174 MHz	136–174 MHz		
		350-400MHz, 400-520MHz	380–470 MHz	EUR: 350–470 MHz, AUS: 400–520 MHz	400–470 MHz		
Channels		1024	1024*1	512	128	128	16
Digital Channel Spacing		6.25/12.5 kHz	6.25/12.5*2 kHz	6.25/12.5*2 kHz	6.25 kHz		
Dimensions*3 (W × H × D: Projections are not included)		55.4 x 138.0 x 32.1 mm	53.6 × 123.5 × 29.3 mm	56 × 91.5 × 29 mm	52.2 × 111.8 × 34.1 mm	52.2 × 111.8 × 29.4 mm	
Weight (approx.)		350 g	340 g (VHF) 335 g (UHF)	230 g	277 g	266 g	258 g
RF output power (High)		5 W	5 W	5 W	5 W		
IP Rating / Military Standard		IP68 / MIL-STD-810G	IP68 / MIL-STD-810G	IP67/66/55/54 / MIL-STD-810G	IP67 / MIL-STD-810G		
Operating Time*3*4 (Hours)		13	16.5	13	18 (IC-F1100D series) 17 (IC-F2100D series)		
Display		●	●	●	●	●	
Keypad		Full for DT version Limited for DS version	Full for DT version Limited for DS version	Limited	Full	Limited	
AF Output Power (Internal SP)		1300 mW typ.	1300 mW typ.	1500 mW typ.	1500 mW typ.		
Encryption	DES (4-key)	●	●				
	DES (64-key)	Optional	Optional				
	AES	Optional	Optional				
Voice Scrambler (Digital)		●	●	●		●	
Voice Scrambler (Analogue)*5		●	●	●			
OTAP (Over-the-Air Programming)		●*14	●*14	●*14			
OTAR (Over-the-Air Rekeying)			●				
CTCSS/DTCS	Encoder/Decoder	●	●	●		●	
2-Tone	Encoder/Decoder	●	●	●		●	
5-Tone	Encoder/Decoder	●	●	●		●	
DTMF		●	●	●		●	
MDC 1200		●	●	●		●*15	
BIIS 1200			●	●		●*6	
Man Down		●	●	●		●	
Motion Detection Sensor		●	●	●		●	
Lone Worker		●	●	●		●	
Channel Announcement		●	●	●		●	
Vibration Alert		●	●	●			
Voice Recorder		●	●	●			
Bluetooth® Capability		● (LE)	●	●			
GPS Receiver		●	●				
Short Data Message		●	●	●		●*8	
Status Message		●	●	●		●*8	
Emergency Call		●	●	●		●	
Stun/Kill/Revive		●	●	●		●*9	
Remote Monitor		●	●	●		●*9	
NXDN™*10	Conventional	●	●	●		●	
	Multi-Site Conventional	●	●	●		●	
	Simulcast	●	●	●		●	
	Type-D Trunking	Optional	Optional	Optional	Single Site only		
dPMR™*10	Mode 1/ Mode 2		●	●		●	
	Mode 2 Multi-site		●	●		●	
	Mode 3 Trunking		Optional	Optional			

IDAS™ Mobile Radios Feature Comparison

Functions / Specifications		IC-F5400D/IC-F6400D SERIES IC-F5400D/DP IC-F6400D/DP	IC-F5330D IC-F6330D IC-F5330D IC-F6330D	IC-F5130D IC-F6130D IC-F5130D IC-F6130D
Frequency Range		136–174 MHz 380–470 MHz	136–174 MHz 400–520 MHz	136–174 MHz 400-520MHz
Channels		1024*1	128	128
Digital Channel Spacing		6.25/12.5*2 kHz	6.25 kHz	6.25 kHz
Dimensions (W × H × D: Projections are not included)		174 × 55 × 150 mm	150 × 45 × 161.8 mm (Main unit) 134.8 × 60.8 × 35.5 mm (Mic)	150 × 45 × 151.8 mm
Weight (approx.)		1.5 kg	1.2 kg (Main unit) 250 g (Mic)	1.23 kg
RF output power (High)		25 W	25 W	25 W
IP Rating / Military Standard		IP55 / MIL-STD-810G	IPX4 (MIC) / MIL-STD-810G	MIL-STD-810G
Display		●	●	●
Keypad		●	●	●
AF Output Power (Internal SP)		4 W typ.	1.7 W typ.	4 W typ.
Encryption	DES (4-key)	●		
	DES (64-key)	Optional		
	AES	Optional		
Voice Scrambler (Digital)		●	●	●
Voice Scrambler (Analogue)*5		●		
OTAP (Over-the-Air Programming)		●*14		
OTAR (Over-the-Air Rekeying)		●		
CTCSS/DTCS	Encoder/Decoder	●	●	●
2-Tone	Encoder/Decoder	●	●	●
5-Tone	Encoder/Decoder	●	●	●
DTMF		●	●	●
MDC 1200		●	●*15	●*15
BIIS 1200		●	●*6	●*6
Lone Worker		●	●	●
Channel Announcement		●		
Voice Recorder		●		
Bluetooth® Capability		●	●*11	Optional
GPS Receiver		●*12		
Short Data Message		●	●	●
Status		●	●	●
Emergency Call		●	●	●
Stun/Kill/Revive		●	●*9	●*9
Remote Monitor		●	●*9	●*9
Front Panel Separation		Optional		
Multiple Controller Capability		●		
CommandMic™ Capability		●	●	
I/O Control Port		USB, D-SUB, Ignition sense	Ignition sense, D-SUB option*13	Ignition sense, D-SUB option*13
NXDN™ *10	Conventional	●	●	●
	Multi-Site Conventional	●	●	●
	Simulcast	●	●	●
	Type-D Trunking	Optional	Single site only	Single site only
dPMR™ *10	Mode 1/ Mode 2	●		
	Mode 2 Multi-site	●		
	Mode 3 Trunking	Optional		

*1 Upgrade licence (ISL-CHEX) required to enable 4000 channel capacity. *2 NXDN™ only *3 With standard battery pack *4 IDAS™: Conventional mode, 5:5:90 duty cycle, power save ON
*5 Inversion type voice scrambler is not compatible with UT-109R/UT-110R voice scrambler. *6 PTT ID and emergency call *7 PTT ID only
*8 The non-display model beeps and its LED indicator blinks when receiving a message. *9 RX only *10 Default factory setting (Protocol) differs, depending on the radio model.
*11 Depending on versions *12 UX-241 antenna is required. *13 D-SUB. Digital modulation input is not available even when using accessory cables.
*14 CS-OTPM1 OTAP Manager Software is separately required to send the OTAP data to the transceivers. *15 PTT ID, emergency call, radio check (RX), and stun/revive (RX).

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



VHF and UHF Digital Repeaters

IC-FR5300/FR6300

NXDN™

Compatible with Analogue and IDAS™ All Modes Including Simulcast

- Digital conventional mode and analogue FM mixed mode
- 25 W at 100% duty cycle operation (ambient temperature: 25°C)
- Compatible with digital simulcast system with the optional UC-FR5300 #14 network controller and GPS antenna
- Multi-site conventional or trunking system configuration with the optional UC-FR5300
- "Two channels in one box" configuration with optional UR-FR5300/UR-FR6300

For dPMR™ protocol mode operation, use the IC-FR5100/FR6100 repeater.



dPMR™ Mode 3 External Controller

IC-FC5000E

dPMR™

IDAS™ dPMR™ Mode 3 Trunking Controller

- Spectrum efficient centralized control channel trunking
- Up to 32 channels per site (one control channel, up to 31 traffic channels)
- Up to 32 site multi-site trunking with CSFC5000SCS system control software
- Up to 256 site multi-region connection
- Call queuing and emergency call with pre-emption
- Repeater anomaly detection and alert
- A traffic channel can be configured as a secondary control channel
- 1U (44 mm) rack mount

Use with the IC-FR5100/FR6100 repeater and UC-FR5000SE Ethernet board.

System Manager

RS-MGR1

NXDN™

Enhance System Management for NXDN™ 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

Key Loader Software

CS-KLD2

NXDN™ dPMR™

Generate Secure and Efficient Encryption

- Key loader software for AES/DES encryption
- Software for IDAS™ radios
- Compatible with IC-F3600D/F3400D/F5400D series

OTAP Manager Software

CS-OTPM1

NXDN™ dPMR™

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 be shared with a whole fleet with only one click
- Up to 10,000 sessions are logged for review and rescheduling
- Manages up to 100,000 radios

NEW

Dispatcher Software

RC-FS20

NXDN™ dPMR™

Integrated Dispatch and Radio Management System

- Monitor and dispatch IDAS™ radios from a single PC
- Displays the indoor location of IC-F3600D/F4600D series radios using Bluetooth® LE beacons*
- See RoIP & Network (p.13–14) for solution detail

* Bluetooth® beacons are required separately.



VHF and UHF Transceivers

IC–F1000/F2000 Series

Big Sound, Small Package! Unmatched 1500 mW Audio

- 128 channels (16 channels for the non-display model)
- 5 W (VHF) and 4 W (UHF) output power
- Motion/Stationary sensor • Man down and Lone worker function
- 1500 mW loud audio • 20 hours battery life (with BP-280)
- Channel announcement
- IP67 / MIL-STD-810G



VHF and UHF Transceivers

IC–F3002/F4002

5 W Output Power Also in UHF, 1500 mW Loud Audio

- 16 channels • Lone worker function
- 5 W output power both in VHF and UHF
- 1500 mW loud audio • 31 hours battery life (with BP-299)
- Built-in 2-Tone, 5-Tone, CTCSS and DTCS
- BIIS 1200 PTT ID transmission • MDC 1200 PTT ID and emergency
- IP54 / MIL-STD-810G



VHF and UHF Transceivers

IC–F5022/F6022
IC–F5012/F6012

Affordable Analogue Mobile Radios

- 2 models for display or non-display
- 128 channels with display (IC-F5022/F6022) or 8 channels with LED (IC-F5012/F6012)
- Lone worker function
- 4 W (typical) front mounted speaker
- External device connection with optional ACC cable

IC-F5022/F6022 IC-F5012/F6012

Functions / Specifications	IC-F1000T IC-F2000T	IC-F1000S IC-F2000S	IC-F1000 IC-F2000	IC-F3002 IC-F4002	IC-F5022 IC-F6022	IC-F5012 IC-F6012
Frequency Range	136–174 MHz			136–174 MHz	136–174 MHz	
	400–470 MHz			400–470 MHz	400–470 MHz	
Channels	128	128	16	16	128	8
Channel Spacing	12.5, 20, 25 kHz			12.5, 20, 25 kHz	12.5, 20, 25 kHz	
Dimensions*1 (W × H × D: Projections are not included)	52.2 × 111.8 × 30.3 mm			58 × 111 × 35.5 mm	150 × 40 × 117.5 mm	
Weight*1 (approx.)	270 g			272 g	800 g	
RF output power (High)	5 W (VHF), 4 W (UHF)			5 W (VHF/UHF)	25 W	
IP Rating / Military Standard	IP67 / MIL-STD-810G			IP54 / MIL-STD-810G	MIL-STD-810F	
Operating Time*2 (Hours)	20 hours (with BP-280)			31		
Display	●	●			●	LED lighting
Keypad	Full	Limited			●	
AF Output Power (Internal SP)	1500 mW typ.			1500 mW typ.	4 W typ.	
CTCSS/DTCS Encoder/Decoder	●			●	●	
2-Tone/5-Tone Encoder/Decoder	●			●	●	
DTMF	●			●	●	
MDC 1200	●*6			●*3	●*6	
BIIS 1200	●*7 (IC-F2000 series only)			●*3	●*5	
Man Down	●					
Lone Worker	●			●	●	
Motion Detection Sensor	●					
Channel Announcement	●					
Emergency Call	●			●	●	
Stun/Kill/Revive	●*4			●*4	●*4	
Remote Monitor	●*4			●*4	●*4	

*1 With standard battery pack *2 5:5:90 duty cycle, power save ON *3 PTT ID and emergency call *4 RX only *5 PTT ID only
*6 PTT ID, emergency (TX/RX), radio check (RX), stun/revive (RX) only *7 PTT ID, emergency (TX/RX) only, depending on version

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

Licence-Free Radios for Professional Use

dPMR 446/PMR446 Transceiver

IC-F29SDR

Digital/Analogue



Multifunctional Professional Radio, Talk, Listen and See Messages

- dPMR 446 (Digital) and PMR 446 (Analogue) in one radio, Digital 32 channels, Analogue 16 channels
- Display and 4 programmable keys on the front
- Status message
- IP67 / MIL-STD-810G
- Alert-Ring function for emergency situations
- 26 hours battery life (with BP-280)
- 11 km coverage*

dPMR™ Mode 1

* Wide open space. Communication range will vary, depending on the terrain and conditions.

dPMR 446/PMR446 Transceiver

IC-F29DR3

Digital/Analogue



Digital Licence-Free Radio with Professional Durability

- dPMR 446 (Digital) and PMR 446 (Analogue) in one radio, Digital 32 channels, Analogue 16 channels
- IP67 / MIL-STD-810G
- 26 hours battery life (with BP-280)
- Lone Worker function
- AquaQuake™
- 11 km coverage*

dPMR™ Mode 1

* Wide open space. Communication range will vary, depending on the terrain and conditions

PMR446 Transceiver

IC-F29SR2

Analogue



Reliable High-Grade Radio for Demanding Workplaces

- PMR 446 (Analogue 16 channels)
- IP67 / MIL-STD-810G
- 33 hours battery life (with BP-280)
- 8 km coverage*
- Smart-ring function to check communication range
- Call-ring function to call receivers with a ringer tone

* Wide open space. Communication range will vary, depending on the terrain and conditions.

PMR446 Transceiver

IC-U20SR

Analogue



Boost Your Communication Efficiency with the Instant Licence-Free Radio

- PMR 446 (Analogue 16 channels)
- Compact and lightweight with IP54 / MIL-STD-810G
- 21 hours operation with BP-304A
- USB Type-C™ charging
- Emergency call button on the top of the panel
- Smart-ring function to check communication range
- Alert-ring function for emergency situation
- 8 km coverage*

* Wide open space. Communication range will vary, depending on the terrain and conditions.



Functions / Specifications		IC-F29SDR	IC-F29DR3	IC-F29SR2	IC-U20SR
Usable Channels		PMR446: 16 ch dPMR446: 32 ch	PMR446: 16 ch dPMR446: 32 ch	PMR446: 16 ch	PMR446: 16 ch
Channel Spacing		6.25, 12.5 kHz	6.25, 12.5 kHz	12.5 kHz	12.5 kHz
Dimensions*1 (W × H × D: Projections are not included)		52.2 × 111.8 × 29.4 mm	52.2 × 111.8 × 29.4 mm	52.2 × 111.8 × 30.3 mm	50.0 × 156.0 ×26.7 mm
Weight*1 (approx.)		270 g	270 g	270 g	157 g
RF output power (High)		500 mW (ERP)	500 mW (ERP)	500 mW (ERP)	500 mW (ERP)
IP Rating / Military Standard		IP67 / MIL-STD-810G	IP67 / MIL-STD-810G	IP67 / MIL-STD-810G	IP54 / MIL-STD-810G
Operating Time*2 (Hours)		26	26	33	21
Display		●			●
Keypad		Limited			Limited
AF Output Power (Internal SP)		1500 mW typ.	1500 mW typ.	1500 mW typ.	600 mW typ.
CTCSS/DTCS	Encoder/Decoder	●	●	●	●
2-Tone	Encoder/Decoder				
5-Tone	Encoder/Decoder				
DTMF					
MDC 1200					●*3
Man Down					
Lone Worker		●	●		●
Motion Detection Sensor					
Channel Announcement		●	●	●	●
Status Message		●			
Emergency Call					●*4

*1 With standard battery pack *2 5:5:90 duty cycle, power save ON *3 PTT ID and emergency call (TX) *4 TX only. An MDC compatible transceiver is necessary for receiving.
All stated specifications and features are subject to change without notice or obligation.



Reliable Communication for Explosive Environments

Supporting safe operations in explosive environments through communication, with an intrinsically safe radio designed to IECEx/ATEX standards.

From petrochemical plants and pharmaceutical facilities to food processing operations and paint booths, our explosion-proof solutions deliver reliable protection and exceptional performance in hazardous locations where flammable gases or combustible dust are present. Our products cover risk levels, providing support for your safe operations.

Designed to IECEx/ATEX standards, this radio helps enhance workplace safety while optimizing operational efficiency.



NEW

Intrinsically Safe Digital Transceivers

IC-F3500DEX/ F4500DEX Series

Intrinsically Safe IECEx/ATEX Radio Works in Hazardous Environments

- IDAS™ digital & analogue modes
- Full range of safety functions
- Full dot-matrix display and user-friendly operation
- Optional SAVOX speaker mic/headset accessories
- IP67 / MIL-STD-810G
- Interconnection with other communication systems by the VE-PG4 RoIP Gateway
- Built-in GNSS receiver with multi-constellation support (GPS/GLONASS/Galileo/QZSS)

Activates soon

NXDN™

Approval Pending

IECEx/ATEX Rating	IC-F3540DEX/F4540DEX (1.2 W output)	IC-F3530DEX/F4530DEX (2 W output)
Gas	IECEx: Ex ib IIC T4 Gb ATEX: II 2G Ex ib IIC T4 Gb	IECEx: Ex ib IIB T3 Gb ATEX: II 2G Ex ib IIB T3 Gb
Dust	IECEx: Ex ib IIIC T110°C Db ATEX: II 2D Ex ib IIIC T110°C Db	
Mining	IECEx: Ex ib I Mb ATEX: I M2 Ex ib I Mb	

The application for certification is currently pending.

Specifications	IC-F3540DEX IC-F3530DEX	IC-F4540DEX IC-F4530DEX
Frequency Range	136-174MHz	400-470MHz, 450-520MHz
Channels	512	
Digital Channel Spacing	6.25 kHz	
Dimensions (W × H × D: Projections are not included)	56.2 × 118.0 × 46.3 mm with BP-320EX	
Weight (approx.)	382 g with BP-320EX	
RF Output Power (High)	1.2 W for IC-F3540DEX/F4540DEX 2 W for IC-F3530DEX/F4530DEX	
IP Rating / Military Standard	IP67 / MIL-STD-810G	
Operating Time (Hours)	12 (VHF), 13 (UHF)	
Display	●	
Keypad	Limited	
AF Output Power (Internal SP)	600 mW typ.	



Clear Records for Critical Moments

Capturing the moment with next-generation wearable recording systems. Introducing our body camera, designed to support clear, reliable video recording and enhanced safety across police, security, medical, and transportation sectors.

Featuring Full HD high-definition recording, extended battery life, and rugged waterproof, dustproof, and shock-resistant construction for reliable performance in the most demanding environments. Live streaming capability enables real-time situational awareness and remote monitoring.

Our lightweight, compact design minimizes impact on daily operations while maximizing transparency, incident prevention, and personnel safety. Whether for law enforcement, security services, emergency response, or customer-facing roles, our body cameras provide reliable video records.

Trusted recording technology that delivers peace of mind and operational excellence in the field.



NEW

Body Camera

CAM-100B

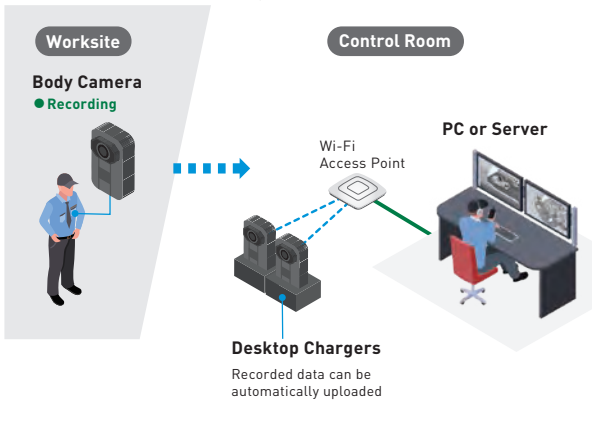
Body-worn Camera with Local Memory Recording and Wi-Fi Live Streaming

- Body-worn camera with local memory card recording and Wi-Fi live streaming
- ONVIF® compatible (Live video streaming)
- 1920 × 1080 pixels, 25 FPS (memory recording mode) / 130 degrees view (image stabilization OFF) / Infrared LED for night vision
- Up to 10 hours of recording / 7 hours of recording + live streaming / Pre-recording function
- Electronic image stabilizer / HDR mode / Anti-flicker function / Mute and Stealth functions
- Dual microphones with wind noise reduction
- Either 64 GB internal memory version*1 or microSD card slot version*2
- Integrated GNSS technology
- IP68 / MIL-STD-810G
- Wi-Fi 6 compatible (2.4 GHz / 5 GHz bands) / WPA3™ enterprise / 802.11k/v/r fast roaming
- Optional MBA-17 or Klick Fast™ system available for mounting

Activates soon

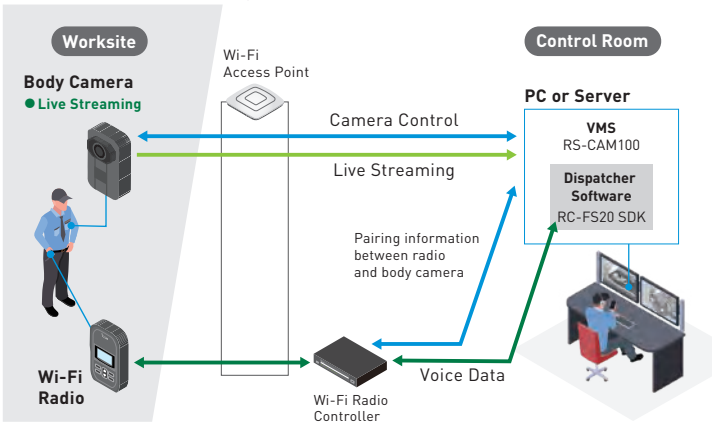
*1 Not user-replaceable.
*2 Memory card not supplied.

Standalone Recording Mode



Records video locally and uploads it to the server for review in the control room.

Wi-Fi Live Streaming Mode



Connects to on-site Wi-Fi® to stream live video and pairs with a Wi-Fi radio for real-time voice communication.

NEW

Video Management System

RS-CAM100

A Video Management System (VMS) for Body Camera Footage and Radio Monitoring

- Three views: Live, Playback, and Archive
- Live view: footage from up to 25 cameras
- Playback view: recent recordings, reviewable before archiving
- Archive view: search and review of footage saved to the server or stored locally
- Also displays footage from the person speaking on the Wi-Fi radio

Activates soon



The CAM-100B and RS-CAM100 are under development and specifications are subject to change.



How the World Communicates

Providing advanced communications, and creating a safe and prosperous society, is what Icom is best at.
We are leading people and society into a bright future by connecting the world with the latest in wireless technology.
Icom is **"How the World Communicates."**

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