

### Look Smart, Work Smart

The IC-F5400D/F6400D series is Icom's new generation IDAS mobile radios. Incorporating cutting edge design, superb performance and a comprehensive range of features on a flexible, upgradable multi-protocol platform. The series is available in both VHF and UHF with either a numeric or full color high resolution LCD. Multiple controller configurations are available to suit almost any vehicle application.

**High resolution color LCD**

**Multiple operating modes  
(Available mode depending on version)**

- NXDN™/dPMR™ conventional
- Upgradable to NXDN™ Type-D trunking
- Upgradable to dPMR™ Mode 3 trunking
- Analog FM

**Built-in Bluetooth®, voice recording, active noise canceller functions\***

\* Version without Bluetooth® also available. Ask your Dealer for details.

**Encryption: DES (4-key, 64-key), AES\***

\* 4-key standard. 64-key DES requires UT-134. AES requires UT-134 and ISL-AKAES.

**Optional OTAR (Over-the-Air-Rekeying) function for AES/DES**

**Optional OTAP (Over-the-Air-Programming) function**

**IP55 jet water resistance and dust-protection**

**Optional detached controller, dual head or COMMANDMIC™ configurations**



IC-F5400D

### General Features

- 136–174, 380–470, 450–520 MHz versions
- 1024 Channels / 128 Zones
- 4000 Channels with optional license key, ISL-CHEX
- High resolution color LCD and intuitive user interface
- Large sized function and four-direction buttons
- Day and night mode display settings
- Programmable functions and menu items in a language other than English (For example French, Spanish, German, Russian and Turkish)
- MIL-STD-810 G shock, vibration, temperature and more
- IP55, water jet resistance and dust protection
- DTMF autodial and decoder

### Operating Mode (Available mode depending on version)

- NXDN or dPMR Mode 1/Mode 2 conventional
- NXDN or dPMR multi-site conventional over IP network
- NXDN Type-D single/multi-site trunking\*  
\* License key (ISL-UGMTR) required.
- dPMR Mode 3 trunking\*  
\* License key (ISL-UGMD3) required. Not available in all regions.
- 12.5 kHz digital mode (NXDN conventional)
- Analog mode
- Analog/digital mixed operation

### Digital Functions (Voice and Data)

- Over-the-Air Programming (OTAP) function\*  
\* OTAP manager (CS-OTPM1) required.
- Over-the-Air Alias (OAA) sends own name with a call
- Over-the-Air Update (OTAU) changes the repeater channel data and site code over the air (NXDN Type-D trunking)
- Individual, group and all call
- Late entry for group call
- Unit ID and talkgroup display on receive
- Status call and polling
- Short data messages (up to 100 characters)
- Call alert (NXDN)
- GPS position
- Transparent data mode

### Analog Functions

- CTCSS and DTCS tone
- 2-Tone and 5-Tone
- MDC functions (Depending on version)
- BIIS 1200 functions (Depending on version)
- LTR™ trunking (Depending on version)



Check our web site to know more about 6.25 kHz FDMA narrow band.  
<https://www.icomjapan.com/explore/digital/>

### Security and Safety

- Encryption: DES (4-key, 64-key)\*, AES  
\* 4-key standard. 64-key DES requires UT-134. AES requires UT-134 and ISL-AKAES.
- Over-the-Air-Rekeying (OTAR) function\*  
\* OTAR manager (CS-OTAR1) required.
- Digital voice scrambler (Low level encryption)
- Analog voice scrambler (Inversion)
- Power ON password
- Tactical group temporarily reconfigures user talkgroups
- Remote Kill, Stun and Revive
- Remote monitor (NXDN)/ambience listening (dPMR)
- Power OFF emergency
- Emergency key for emergency call
- Lone worker function

### Scan Functions

- Priority scan
- Voting scan for site roaming

### Voice/Audio Functions

- Voice announcement (Channel number and zone)
- VOX function for hands-free operation
- Voice recording/playback (Saves to a microSD card)\*  
\* A microSD card is required separately.
- The following information can be embedded in the WAV file; user IDs, GPS position, frequency, AF volume, RSSI, etc. (Depending on setting).
- Customized channel announcement
- TX/RX active noise canceller
- TX/RX audio equalizer (Flat, high/mid/low boost, low cut)
- Audio compander (Analog mode)

### Hardware Features

- Programmable ringer beep\*<sup>1</sup>
- Built-in Bluetooth® for wireless audio and data\*<sup>1</sup>
- A third-party wireless Bluetooth® headset\*<sup>1</sup> (for example, 3M™ Peltor™ WST™ 5 series) can be used\*  
\* Compatibility with third-party Bluetooth® headsets cannot be guaranteed.
- Wireless radio programming over Bluetooth®\*<sup>1</sup>
- USB connector for data transfer mode or card reader mode
- Built-in GPS with GPS position screen and auto log function\*  
\* An optional GPS antenna UX-241 is required.
- Internal clock with time auto adjustment
- Programmable D-SUB connector for external PTT, channel, horn, PA/RX speaker, ignition switch and dimmer control
- Low voltage alert
- Optional detached controller, dual head controller or COMMANDMIC™ configurations
- Intercom function between dual head controller or COMMANDMIC™
- microSD card slot

\*<sup>1</sup> Version without Bluetooth® also available. Ask your Dealer for details.

		IC-F5400D NXDN Version	IC-F5400DP dPMR Version	IC-F6400D NXDN Version	IC-F6400DP dPMR Version
<b>GENERAL</b>					
Frequency coverage* (* Depending on version)		136–174 MHz	136–174 MHz	380–470 MHz, 450–520 MHz	380–470 MHz
Number of channels		1024 channels /128 zones 4000 channels /128 zones (Option)*1			
Type of emission* (* Depending on version)		16K0F3E*2, 14K0F3E, 11K0F3E, 8K50F3E, 8K30F1E/D, 4K00F1E/D	16K0F3E*2, 14K0F3E, 8K50F3E, 4K00F1E/D	16K0F3E*2, 14K0F3E, 11K0F3E, 8K50F3E, 8K30F1E/D, 4K00F1E/D	16K0F3E*2, 14K0F3E, 8K50F3E, 4K00F1E/D
Power supply requirement		13.6 V DC nominal (USA/EXP), 13.2 V DC nominal (EUR)			
Current drain (approx.)	Tx	9.0 A typical (at 50 W) 5.0 A typical (at 25 W)		8.8 A typical (at 45 W) 5.0 A typical (at 25 W)	
	Rx	0.9 A typical/370 mA typical (Max. audio (Internal SP)/Standby)		0.8 A typical/270 mA typical (Max. audio (Internal SP)/Standby)	
Antenna impedance		50 Ω			
Operating temperature range		–30 °C to +60 °C; –22 °F to +140 °F			
Dimensions (W × H × D; Projections not included)		174 × 55 × 150 mm; 6.9 × 2.2 × 5.9 in			
Weight (approx.)		1.5 kg; 3.3 lb			
<b>TRANSMITTER</b>					
Output power (Hi, L2, L1)* (* Depending on version)		50 W, 25 W, 5 W (USA/EXP) 25 W, 10 W, 5.8 W (EUR)		45 W, 25 W, 4.5 W (USA/EXP) 25 W, 10 W, 5.8 W (EUR)	
Frequency stability		±1.0 ppm			
Spurious emissions		90 dB typical (USA)		80 dB typical (USA)	
FM Hum and noise		0.25 μW (≤ 1 GHz), 1.0 μW (> 1 GHz) (EUR)			
Audio harmonic distortion		54 dB typical (@25 kHz), 54 dB typical (@12.5 kHz)			
FSK error		0.5% typical (AF 1 kHz 40% deviation) 1% typical (@DVN/DN)			
<b>RECEIVER</b>					
Sensitivity	Analog (12 dB SINAD)	0.22 μV typical		0.25 μV typical	
	Analog (20 dB SINAD)	–4.0 dBμV emf typical (@25 kHz), –4.0 dBμV emf typical (@12.5 kHz)			
	Digital (1% BER)	–6.0 dBμV emf typical (0.25 μV typical) (@DVN), –5.0 dBμV emf typical (0.28 μV typical) (@DN)			
Adjacent channel selectivity	Analog	75 dB typical (@25/20 kHz), 72 dB typical (@12.5 kHz)			
	Digital	65 dB typical (@DVN), 68 dB typical (@DN)			
Spurious response rejection		85 dB typical			
Intermodulation rejection	Analog	78 dB typical (USA) 70 dB typical (EUR)		75 dB typical (USA) 70 dB typical (EUR)	
	Digital	70 dB typical (@DVN), 70 dB typical (@DN)		70 dB typical (@DVN), 70 dB typical (@DN)	
Audio output power	Internal SP	4.0 W typical (at 5% distortion with 4 Ω load)			
	External SP	4.0 W typical (at 5% distortion with 4 Ω load)			

Measurements made in accordance with TIA-603, EN300 086, EN301 166, EN300 113. All stated specifications are subject to change without notice or obligation.

\*1 Optional license key (ISL-CHEX) required.

\*2 25 kHz bandwidth is no longer available for FCC Part 90 licensees for USA versions.

DVN: Digital Very Narrow (6.25 kHz), DN: Digital Narrow (12.5 kHz). DN is for NXDN version only.

**Applicable U.S. Military Specifications & IP Rating**

Standard	MIL 810G	
	Method	Procedure
Low Pressure	500.5	I, II
High Temperature	501.5	I, II
Low Temperature	502.5	I, II
Temperature Shock	503.5	I-C
Solar Radiation	505.5	I
Rain Blowing/Drip	506.5	I, III
Humidity	507.5	II
Salt Fog	509.5	–
Dust Blowing	510.5	I
Vibration	514.6	I
Shock	516.6	I, IV

Also meets equivalent MIL-STD-810-C, -D, -E and -F.

Ingress Protection Standard	
Dust & Water	IP55 (Dust-protection and jet water resistance)

<b>Supplied accessories:</b> (May differ depending on version)			
• Hand microphone, HM-220 or HM-221	• DC power cable	• Mounting bracket kit	• Microphone hanger

■ HAND MICROPHONES AND DESKTOP MICROPHONE

**HM-220:** Heavy duty microphone. IP54 protection.  
**HM-220T:** Heavy duty microphone with DTMF keypad. IP54 protection.  
**HM-221:** Hand microphone with emergency button. IP55 protection.  
**HM-221T:** Hand microphone with DTMF keypad and emergency button. IP55 protection.  
**SM-29:** Desktop microphone with monitor and monitor lock buttons.



■ COMMANDMIC™ AND SEPARATION KITS

**HM-218:** Remote control microphone for use with RMK-5. IP55 protection.  
**RMK-5:** Separation kit. For detached controller configuration.  
**RMK-7:** Dual-head separation kit. Separation kit and secondary controller for dual head configuration.



■ SEPARATION CABLES

**OPC-2364:** 1.9 m; 6.2 ft separation cable for RMK-5 or RMK-7.  
**OPC-2365:** 3 m; 9.8 ft separation cable for RMK-5 or RMK-7.  
**OPC-2366:** 5 m; 16.4 ft separation cable for RMK-5 or RMK-7.  
**OPC-2367:** 8 m; 26.2 ft separation cable for RMK-5 or RMK-7.  
**OPC-2373:** 1.9 m; 6.2 ft separation cable for HM-218, COMMANDMIC.  
**OPC-2374:** 8 m; 26.2 ft separation cable for HM-218, COMMANDMIC.



■ EXTERNAL SPEAKERS

**SP-30:** External speaker. Cable length 2.6 m; 8.5 ft.  
**SP-35:** Compact external speaker. Cable length 2 m; 6.6 ft.  
**SP-35L:** Compact external speaker. Cable length 6 m; 19.7 ft.



■ GPS ANTENNA

**UX-241:** External GPS antenna. Cable length 5 m; 16.4 ft.

■ AES/DES ENCRYPTION UNIT

**UT-134:** AES/DES encryption unit.

■ ZONE COPY, PROGRAMMING AND DC POWER CABLES

**OPC-2362:** Zone copy cable. Mobile to handheld cable.  
**OPC-2363:** Programming cable.  
**OPC-1132:** DC power cable. Cable length 3 m; 9.8 ft.  
**OPC-347:** DC power cable. Cable length 7 m; 23 ft.



■ SOFTWARE AND ACTIVATION KEYS

**CS-F3400D:** Programming software.  
**CS-KLD2:** Key-loader for UT-134.  
**CS-OTPM1:** OTAP manager software.  
**CS-OTAR1:** OTAR manager software.  
**ISL-UGMTR:** NXDN™ Type-D trunking upgrade key.  
**ISL-UGMD3:** dPMR™ Mode 3 upgrade key.  
**ISL-AKAES:** AES activation key.  
**ISL-CHEX:** Channel expansion key.  
**ISL-AK25K:** 25 kHz activation key.  
**ISL-AKSTM:** Dealer set mode activation key.

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



**Detached Controller**

Optional RMK-5 and separation cable required.



**Dual Head Controller**

Optional RMK-7, hand microphone and separation cables required.



**COMMANDMIC™ and Detached Controller**

Optional RMK-5, COMMANDMIC, HM-218 and separation cables required.

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