

OPTIONS

IC-F5400D • IC-F6400D Series

■ 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.

* HM-218, RMK-5, RMK-7 and separation cables are options for IC-F5400D/F6400D, F5400DP/F6400DP only



■ 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, Dual head and COMMANDMIC configurations are for IC-F5400D/IC-F6400D, F5400DP/F6400DP.

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Icom Inc. 1-1-32, Kamiminami, Hirano-Ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 www.icom.co.jp/world Count on us!

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IC-F5400D Series
 IC-F6400D Series

VHF AND UHF DIGITAL TRANSCEIVERS

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
 (IC-F5400D/IC-F6400D only)

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

Multiple operating modes
 (Available mode depending on version)

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

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

IP55 jet water resistance and
 dust-protection

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

Optional detached controller, dual head
 or COMMANDMIC™ configurations
 (IC-F5400D/IC-F6400D only)

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

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



IC-F5400D



IC-F5400DS



General Features

- 136–174, 380–470, 450–520 MHz versions
- 1024 Channels / 128 Zones, 99 Channels (7 Segment display type)*
* IC-F5400DS/F6400DS/F5400DPS/F6400DPS: Due to the segment display, channel indication is possible for up to 99 selected channels out of 1024.
- 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 1/2 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.
www.icom.co.jp/world/fdma/

| | IC-F5400D/DS NXDN Version | IC-F5400DP/DPS dPMR Version | IC-F6400D/DS NXDN Version | IC-F6400DP/DPS dPMR Version |
|--|---|--|---|--|
| GENERAL | | | | |
| 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 99 channels (7 Segment display type)*2 | | | |
| Type of emission* (* Depending on version) | 16K0F3E*3, 14K0F3E, 11K0F3E, 8K50F3E, 8K30F1E/D, 4K00F1E/D | 16K0F3E*3, 14K0F3E, 8K50F3E, 4K00F1E/D | 16K0F3E*3, 14K0F3E, 11K0F3E, 8K50F3E, 8K30F1E/D, 4K00F1E/D | 16K0F3E*3, 14K0F3E, 8K50F3E, 4K00F1E/D |
| Power supply requirement | 13.6 V DC nominal (USA/EXP), 13.2 V DC nominal (EUR) | | | |
| Current drain (approx.) | Tx | | 8.8 A typical (at 45 W) | |
| | Rx | | 5.0 A typical (at 25 W) | |
| 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 | | | |
| TRANSMITTER | | | | |
| 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 | 54 dB typical (@25 kHz), 54 dB typical (@12.5 kHz) | | | |
| Audio harmonic distortion | 0.5% typical (AF 1 kHz 40% deviation) | | | |
| FSK error | 1% typical (@DVN/DN) | | | |
| RECEIVER | | | | |
| 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) | | |
| Adjacent channel selectivity | Digital (1% BER) | –6.0 dBμV emf typical (0.25 μV typical) (@DVN), –5.0 dBμV emf typical (0.28 μV typical) (@DN) | | |
| | Analog | 75 dB typical (@25/20 kHz), 72 dB typical (@12.5 kHz) | | |
| Spurious response rejection | Digital | 65 dB typical (@DVN), 68 dB typical (@DN) | | |
| | Analog | 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 IC-F5400DS/F6400DS/F5400DPS/F6400DPS: Due to the segment display, channel indication is possible for up to 99 selected channels out of 1024.

*3 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) |

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