

■ HAND MICROPHONES AND DESKTOP MICROPHONE

HM-148G: Heavy duty microphone. IP54 protection.
 HM-148T: Heavy duty microphone with DTMF keypad. IP54 protection.
 HM-152: Hand microphone with emergency button.
 HM-152T: Hand microphone with DTMF keypad.
 SM-26: Desktop microphone with monitor and monitor lock buttons.



■ EXTERNAL SPEAKERS

SP-30: External speaker. 20 W rated input power.
 SP-35/L: Compact external speaker.
 SP-35 cable length: 2 m; 6.6 ft.
 SP-35L cable length: 6 m; 19.7 ft.



■ ACC CABLES

OPC-1939*: ACC cable enables you to connect an external equipment. D-SUB 15-pin type.
 OPC-2078*: ACC cable enables you to connect an external equipment. D-SUB 25-pin type.

* Note: No Digital Modulation "IN" when using accessory cables.



■ PROGRAMMING SOFTWARE AND CABLE

CS-F3230D: Programming software.
 OPC-1122U: Programming cable. (USB type)

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

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IC-F5220D
 IC-F6220D

VHF AND UHF DIGITAL TRANSCEIVERS

Wide-Area Coverage with NXDN™ Multi-Site Trunking

The IC-F5220D/F6220D mobile series is a simple and straight forward range that offers business and industry radio users NXDN™ CAI-based IDAS digital mode operation. Ideal for transportation, and delivery fleets, the streamlined IC-F5220D/F6220D series has an abundance of mobile features and is compatible with multi-site conventional and NXDN™ Type-D multi-site/single-site trunking.

- Multiple operating modes
 - NXDN™ Conventional
 - NXDN™ Type-D multi-site/single-site trunking
 - Analog FM
- Roaming scan
- CTCSS and DTCS (analog mode)
- 50 W (VHF), 45 W (UHF) RF output power
- MIL-STD-810 G rugged construction
- Loud and clear 4 watts (typical) front mount speaker
- Channel announcement



IC-F5220D



General Features

- 136–174, 350–400, 400–470, 450–512, 450–520 MHz versions
- 128 Channels / 8 Zones
- 8-character alphanumeric display
- MIL-STD-810 G shock, vibration, temperature and more
- Four large programmable buttons
- Surveillance function
- Microphone hanger action programmable
- Talk around function
- Time-out-timer, lock-out penalty

Operating Mode

- NXDN™ Conventional
- NXDN™ Type-D multi-site/single-site trunking
- NXDN™ multi-site conventional over IP network
- Analog mode

Digital Functions (Voice and Data)

- PTT ID and ANI
- Block decode
- Up to 500 individual and up to 500 group ID aliases (Each for single-site/multi-site/conventional)
- Status
- Short data message
- Call alert
- Radio check (RX)
- RAN (Radio Access Number)
- All trunks busy ring back

Analog Functions

- CTCSS and DTCS tone

Security and Safety

- Digital voice scrambler
- Radio Kill, Stun and Revive (RX)
- Emergency
- Power OFF emergency
- Lone worker function
- Power ON password function
- Remote monitor (RX)

Scan Functions

- Roaming scan
- Priority scan
- Voting scan
- Nuisance delete function

Voice/Audio Functions

- 4 W (typical) front mounted speaker
- Channel announcement
- Escalating alarm

Hardware Features

- GPS receiver connection with optional ACC cable
- Optional D-SUB connector, OPC-2078/OPC-1939, for external PTT, channel, horn, PA/RX speaker, ignition switch and dimmer control, according to programming*
* No digital modulation “IN” when using accessory cables.



Photo includes optional OPC-2078.

- Supplied compact hand microphone, HM-152



Check our web site to know more about 6.25 kHz FDMA narrow band. www.icom.co.jp/world/fdma/

	IC-F5220D (USA/EXP)	IC-F6220D (USA/EXP)
GENERAL		
Frequency coverage* (* Depending on version)	136–174 MHz	350–400 MHz (EXP), 400–470 MHz (USA/EXP), 450–512 MHz (USA), 450–520 MHz (EXP)
Number of channels	128 channels/8 zones	
Type of emission* (* Depending on version)	16K0F3E*, 11K0F3E, 8K50F3E, 4K00F1E/D	
Channel spacing	25*/15/12.5/6.25 kHz	
Power supply requirement	13.6 V DC	
Current drain (approx.)	Tx	10 A (at 50 W)
	Rx	1.2 A /300 mA (Max. audio/Standby)
Antenna impedance	50 Ω (SO-239)	
Operating temperature range	–30 °C to +60 °C; –22 °F to +140 °F	
Dimensions (W × H × D; Projections not included)	150 × 40 × 167.5 mm; 5.9 × 1.6 × 6.6 in	
Weight (approximate)	1.1 kg; 2.4 lb	
TRANSMITTER		
Output power (Hi, L2, L1)	50 W, 25 W, 5 W (Hi, L2, L1)	45 W, 25 W, 4.5 W (Hi, L2, L1)
Frequency stability	±1.0 ppm	
Spurious emissions	87 dB typical	85 dB typical
FM Hum and noise	50 dB typical (@25 kHz), 45 dB typical (@15/12.5 kHz)	46 dB typical (@25 kHz), 40 dB typical (@15/12.5 kHz)
Audio harmonic distortion	3% typical (AF 1 kHz 40% deviation)	
FSK error	2% typical (@Digital)	
External microphone impedance	600Ω (8-pin modular)	
RECEIVER		
Sensitivity	Analog (12 dB SINAD)	0.25 μV typical
	Digital (5% BER)	–8 dBμV emf typical (0.2 μV typical)
Adjacent channel selectivity	Analog	80 dB typical (@25 kHz), 70 dB typical (@15/12.5 kHz)
	Digital	75 dB typical (@25 kHz), 66 dB typical (@15/12.5 kHz)
Spurious response rejection	65 dB typical	60 dB typical
Intermodulation rejection	Analog	80 dB typical
	Digital	75 dB typical (@25 kHz), 75 dB typical (@15/12.5 kHz)
Audio output power	Hum and noise	70 dB typical
	Internal SP	45 dB typical (@25 kHz), 40 dB typical (@15/12.5 kHz)
	External SP	4.0 W typical (at 5% distortion with 4 Ω load)
External speaker connector	4.0 W typical (at 5% distortion with 4 Ω load)	
	2-conductor 3.5 (d) mm (1/8")/4 Ω	

Measurements made in accordance with TIA-603. EN-301 166. All stated specifications are subject to change without notice or obligation.
* 25 kHz bandwidth is no longer available for FCC Part 90 licensees for USA versions.

Applicable U.S. Military Specifications

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
Humidity	507.5	II
Vibration	514.6	I
Shock	516.6	I, IV

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

Supplied accessories:

- HM-152 hand microphone
- DC power cable
- Mounting bracket kit
- Microphone hanger
- Key assign stickers