



# IC-F1100DT IC-F2100DT

## VHF AND UHF DIGITAL TRANSCEIVERS

### Big on Audio, Small on Size 1500 mW Class Leading Audio



IC-F1100DT

IC-F2100DT



- 136–174, 350–400, 400–470, 450–520 MHz
- 128 Channels / 8 Zones
- Compact (52.2 (W) × 111.8 (H) mm; 2.1 × 4.4 in) and lightweight
- IP67 waterproof and dust-tight protection
- Tested to 12 categories of MIL-STD-810-G environmental tests
- AquaQuake™ – Expels water ingress from the speaker grill
- DTMF autodial memories
- 16-position rotary selector and ON/OFF volume knob
- Programmable keys – Increase the number of programmable key assignments by using the “Shift key”
- Eight character alphanumeric display
- Three color LED

- AMBE+2™ vocoder
- Over-the-Air Alias (OAA) displays the caller’s name without programming
- Individual, Group and All call
- Late entry for Group call
- Status call and Polling
- Short data messages
- Call alert (NXDN)
- Radio check (RX only) (NXDN)
- GPS position capabilities (requires HM-171GPW)
- Up to 500 ID numbers for IDAS or MDC 1200 signaling system can be saved in the Call List to show the alias name

- CTCSS and DTCS tone
- 2-Tone and 5-Tone
- MDC functions\*; PTT ID, Emergency (TX/RX), Radio check (RX), Stun (RX), Revive (RX) (\* Depending on version)
- BIIS PTT ID transmission

- Digital voice scrambler (Low level encryption)
- Radio Stun/Revive/Kill (RX only)
- Remote monitor (NXDN)/ambience listening (dPMR)
- Man down, Lone worker and Emergency call key capability
- Motion and Stationary detection function
- Surveillance function temporarily turns OFF the beep and LED indicator
- Power ON password

- Priority scan monitors one or two priority channels while scanning non-priority channels
- Voting scan automatically selects the optimal repeater site
- Mode dependent scan automatically changes the scan list, depending on the operating channel
- Power ON scan function
- Talk Back timer

- Channel announcement function
- VOX function for hands-free operation
- Siren sound for security alarm

- Operating time of up to 20 hours with the BP-280

# IC-F1100DT • IC-F2100DT

## SPECIFICATIONS

		IC-F1100DT	IC-F2100DT
<b>GENERAL</b>			
Frequency coverage		136-174 MHz	350-400 MHz 400-470 MHz 450-520 MHz
Number of channels		128 channels/ 8 zones	
Type of emission		16K0F3E, 14K0F3E, 11K0F3E, 8K50F3E, 4K00F1E, 4K00F1D	
Channel spacing		25/20/1205/6.25 kHz	
Power supply requirement		7.5 V DC nominal	
Current drain	Tx	1.3 A (at 5 W)	1.6 A (at 5 W)
	Rx	520 mA /110 mA (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)/Weight		52.2 × 111.8 × 34.1 mm; 2.1 × 4.4 × 1.3 in (With BP-280) / 277 g	
<b>TRANSMITTER</b>			
Output power (Hi, L2, L1)		5 W, 2 W, 1 W	
Maximum frequency deviation		± 5.0 kHz (25 kHz), ± 4.0 kHz (20 kHz), ± 2.5 kHz (12.5 kHz)	
Spurious emissions		70 dB minimum 0.25 μW (≤ 1 GHz), 1.0 μW (> 1 GHz)	
Frequency stability		± 2.0 ppm	± 1.0 ppm
Audio frequency response		+1 dB to -3dB of 6dB/ octave range from 300Hz to 3000Hz (25 kHz)/2550 (12.5k Hz)	
Adjacent channel power		75 dB (25 kHz) 70 dB (12.5 kHz)	
Audio harmonic distortion		0.7%/0.9%/1.0% (25/20/12.5 kHz) (at AF 1 kHz 40% deviation)	
FM Hum and Noise		55 dB (25 kHz), 50 dB (12.5 kHz)	
Residual modulations		55/52/50 dB (25/20/12.5 kHz)	
FSK error		5% maximum	
External microphone connector		3-conductor 2.5 (d) mm (1/10 in)/2.2 kΩ	
<b>RECEIVER</b>			
Sensitivity	Digital	-9 dBμV emf (0.18 μV) (at 5% BER)	-8 dBμV emf (0.20 μV) (at 5% BER)
	Analog	0.24 μV (at 12 dB SINAD)	
Adjacent channel selectivity	Digital	60 dB	
	Analog	80/75/70 dB (25/20/12.5 kHz)	
Spurious response rejection		80 dB	
Intermodulation rejection	Digital	75 dB, 75 dBμV emf	
Audio frequency response	Analog	80 dB (25 kHz), 75 dB (12.5 kHz)	
		+1 dB to -3dB of 6dB/ octave range from 300Hz to 3000Hz (25 kHz)/2550 (12.5k Hz)	
Hum and noise		55 dB (25 kHz), 50 dB (12.5 kHz)	
AF output power (at 5% distortion)		1500 mW int. speaker/450 mW ext. speaker (With an 8 Ω load)	
External speaker connector		2-conductor 3.5 (d) mm (1/8 in)/8 Ω	

All stated specifications are subject to change without notice or obligation. Measurements made in accordance with TIA-603 or EN 300-086, EN 301-166

### 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
Immersion	512.5	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	IP67 (Dust-tight and Immersion) IP55/IP54 (Dust and Water jets/Water resistant)

### BATTERY PACKS

Battery packs	Type	Capacity	Operating time*
BP-279	Li-ion 7.2V	1600mAh	14 hours (Approx.)
BP-280	Li-ion 7.2V	2450mAh	20 hours (Approx.)

\*Tx; Rx; standby = 5:5:90. Power save function ON. Capacity : Typical Spec.



### BELT CLIP



MB-133 Alligator type Same as supplied

### RAPID CHARGER



BC-123SA

BC-213

### MULTI-CHARGER



BC-214

Chargers up to six BP-279 battery packs in 2.5 hour (approx.)

### CIGARETTE LIGHTER CABLE & POWER SUPPLY CABLE



CP-23L

OPC-656

For use with BC-213

For use with BC-214

### PTT SWITCH CABLE & PLUG ADAPTER CABLE



VS-4LA

OPC-2004LA

Either VS-4LA or OPC-2004LA is require when using HS-97

### SPEAKER-MICROPHONE



HM-171GPW

HM-168LWP

HM-159LA

HM-158LA

### EARPHONE-MICROPHONE



HM-2PL-OW

HM-166LA

GSR-M1 Earphone Microphone for Thai Version Only

### CHARGER BRACKET



MB-130

For use with BC-213

CHARGER ADAPTER AD-130 Charger adapter is supplied with the BC-213

### HEADSETS



HS-94LWP

HS-95LWP

HS-97

Ear-hook type

Behind-the-head type

Throat type

### STANDARD ANTENNAS

- FA-SC25V: 136-150MHz • FA-SC72U: 470-520MHz
- FA-SC55V: 150-174MHz • FA-SC01U: 350-400MHz
- FA-SC25U: 400-430MHz
- FA-SC57U: 430-470MHz

### STUBBY ANTENNAS

- FA-SC26VS: 136-144MHz • FA-SC26US: 400-450MHz
- FA-SC27VS: 142-150MHz • FA-SC73US: 450-490MHz
- FA-SC56VS: 150-162MHz
- FA-SC57VS: 162-174MHz

### CUT ANTENNAS HIGH GAIN ANTENNAS

- FA-SC61VC: 136-174MHz • FA-SC62V: 150-160MHz
- FA-SC61UC: 380-520MHz • FA-SC63V: 155-165MHz



The "3D GENUINE Icom Label" is attached to the rear chassis under the battery. Check the Icom website for details: <http://www.icom.co.jp/world/genuine-info/>

Supplied accessories: (May differ depending on version)		
• Battery pack, BP-279 or BP-280	• Desktop charger, BC-213	• AC adapter, BC-123S
• Belt clip, MB-133	• Antenna	

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