



# 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	25/20/12.5/6.25 kHz	
Power supply requirement	7.5 V DC nominal	
Current drain	Tx 1.3 A (at 5 W) Rx 520 mA /110 mA (Max. audio (internal SP)/Standby)	1.6 A (at 5 W)
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 μV (≤ 1 GHz), 1.0 μV (> 1 GHz)	
Frequency stability	± 2.0 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) Analog 0.24 μV (at 12 dB SINAD) –5/–5/–2 dBμV emf (25/20/12.5 kHz) (at 20 dB SINAD)	–8 dBμV emf (0.20 μV) (at 5% BER)
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 Analog 80 dB (25 kHz), 75 dB (12.5 kHz)	
Audio frequency response	+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)

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### BATTERY PACKS

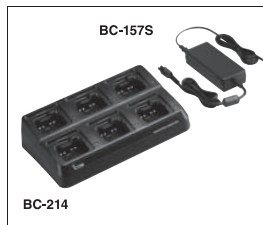
Battery packs	Type	Capacity	Operatings time*
BP-279	Li-on 7.2V	1600mAh	14 hours (Approx.)
BP-280	Li-on 7.2V	2450mAh	20 hours (Approx.)

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

### BATTERY CHARGERS

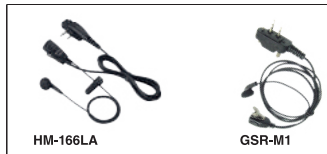
**BC-213:** Desktop charger  
Charges the BP-279 or BP-280. Charges the BP-280 in 3.5 hours (approximate).  
+ **BC-123SA/SE/SUK/SV** or **BC-242:** AC adapter.

**BC-214:** Multi-charger.  
Charges up to six radios and/or batteries at the same time.  
+ **BC-157S:** AC adapter.  
\* AD-130 charger adapter is supplied with the BC-214, depending on the version.



### EARPHONE-MICROPHONES

**HM-166LA:** Light weight lapel microphone with earphone.  
**GSR-M1:** Earphone microphone for Thai version only



### SPEAKER-MICROPHONES

**HM-171GPW:** GPS speaker microphone with a waterproof connector. IP67 protection.  
**HM-168LWP:** Waterproof speaker microphone with a waterproof connector. IP67 protection.  
**HM-159LA:** Speaker microphone with a 3.5 mm earphone jack.  
**HM-158LA:** Compact speaker microphone with a 3.5 mm earphone jack.



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



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/>

### POWER SUPPLY CABLES AND CHARGER BRACKET

**CP-23L:** Vehicle charger cable for use with the BC-213.  
**OPC-656:** DC power cable for use with the BC-214.  
**MB-130:** Charger bracket for use with the BC-213.

### BELT CLIP

**MB-133:** Alligator belt clip. Same as supplied.

### SOFTWARE AND CABLE

**CS-F2100D:** Programming software.  
**OPC-478UC:** USB type radio programming cable.

### ANTENNAS

**FA-SC25V:** 136–150 MHz  
**FA-SC28V:** 148–162 MHz  
**FA-SC29V:** 160–174 MHz  
**FA-SC55V:** 150–174 MHz  
**FA-SC25U:** 400–430 MHz  
**FA-SC57U:** 430–470 MHz  
**FA-SC72U:** 470–520 MHz  
**FA-SC01U:** 350–400 MHz  
**FA-SC02U:** 330–380 MHz

### STUBBY ANTENNAS

**FA-SC26VS:** 136–144 MHz  
**FA-SC27VS:** 142–150 MHz  
**FA-SC56VS:** 150–162 MHz  
**FA-SC72VS:** 160–174 MHz  
**FA-SC26US:** 400–450 MHz  
**FA-SC73US:** 450–490 MHz

### CUT-TYPE ANTENNAS

**FA-SC61VC:** 136–174 MHz  
**FA-SC61VC:** 380–520 MHz

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