



## VHF AND UHF TRANSCEIVERS

**IC-F50** (VHF Transceiver)

**IC-F60** (UHF Transceiver)

**Submersible**

1m depth for 30 minutes

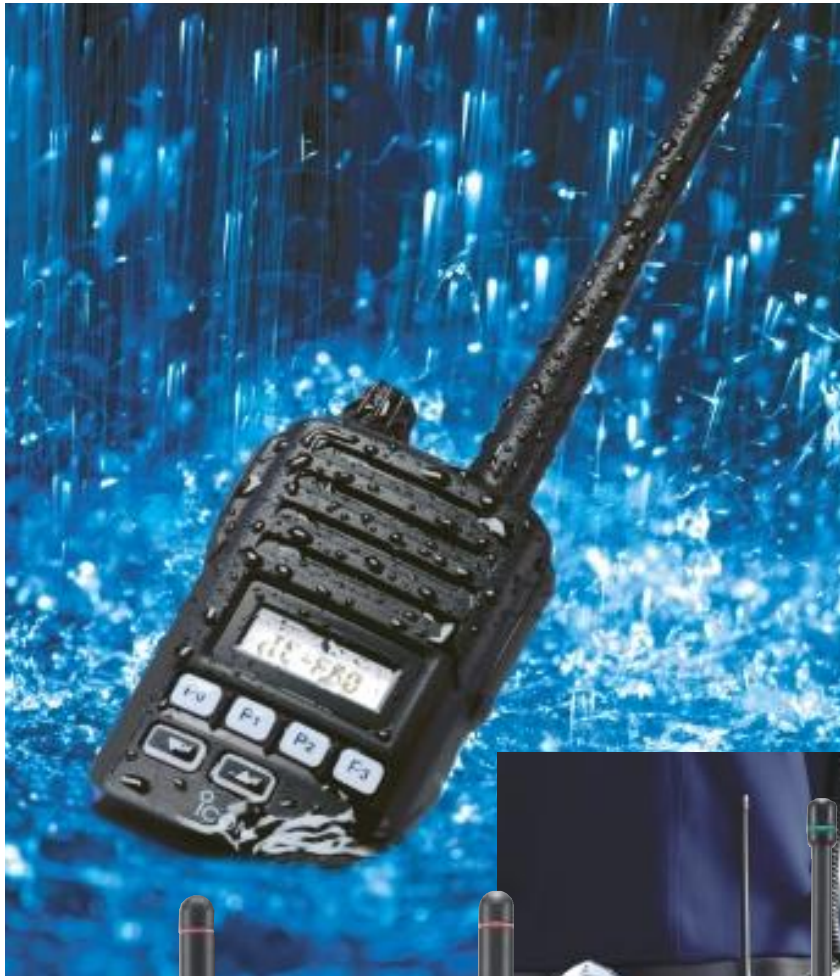
Meets  
**MIL-STD 810**



**BIIS 1200**  
Compatible

Photo includes optional speaker-microphone, HM-139

**Icom Inc.**



# Superior Wat Supports Del

Firefighters, Police, Security, own unique challenges, but a munications. Icom's IC-F50/F easy to use. Rain or shine, th

## JIS Grade 7 Waterproof protection

The gasket sealed waterproof housing provides superior waterproof protection, equivalent to JIS Grade 7\*. Reliable and dependable use in harsh conditions such as rain, snow, sudden change in temperature, make the IC-F50/F60 the radio for all situations.



\* 1m depth for 30 minutes.

## Built-in Tone signaling

Use the built-in CTCSS, DTCS, 2-Tone and 5-Tone capability to set up your own talk groups and quiet stand-by when others are talking. You can also set up selective calls to individuals or control a repeater.

## Multiple 2-Tone, Multiple 5-Tone

Up to 10 2-Tone codes can be decoded on a single memory channel. This is perfect for professionals who require multiple district paging on one channel. When a matched tone is received, the following items are programmable for each code.

- Bell icon
- Answer back
- Stun
- Beep sound
- Auto transmit
- Scan

## VHF AND UHF TRANSCIVERS

# IC-F50

VHF transceiver

# IC-F60

UHF transceiver



▼ IC-F50

▼ IC-F60





# Waterproof Protection Demanding Communication

Oil industry and Public utilities. Each profession has its all have one thing in common: the need for reliable com-  
-60 offers a compact waterproof, MIL STD package, that's  
his radio keeps you in contact in nearly any environment.



## Li-Ion battery pack

The large capacity 1700mAh Lithium-Ion (Li-Ion) battery pack, BP-227 provides a practical 10 hours\* of operating time. Li-Ion batteries allow flexible charging and have almost no memory effect.

\* Typical operation Tx:Rx: Stand-by=5:5:90

## Up to 7 programmable buttons

The [PO]-[P3], [Red] and [Up], [Down] buttons are programmable to meet specific needs. The [Red] button on the top panel can be assigned as an emergency trigger.

## Alphanumeric display

The 8-character alphanumeric display shows channel, bank, tone code and scanning channel names on the display. 7 operational icons on the sub-line show various status at a glance.



Upper and lower case characters available.

## Wide range coverage and large channel capacity

The IC-F50/F60 covers a wide frequency range in one version. The large capacity of 128 memory channels with 8 memory banks allows you to divide and store a variety of channels from local to wide area network channels. Both wide and narrow (25/12.5kHz) channel bandwidth is programmable to each channel.

## Compact body

56(W)×97(H)×36.4(D) mm\* compact body with durable, dependable construction, meets MIL standard specifications.

\* 2<sup>7</sup>/<sub>32</sub>(W)×3<sup>13</sup>/<sub>16</sub>(H)×1<sup>7</sup>/<sub>16</sub>(D) in

## Built-in voice scrambler

The IC-F50/F60 has a built-in inversion type voice scrambler in all versions. When a more secure system is required, versions with a rolling type voice scrambler\* equivalent to the UT-110 are available.

\* Built-in, optional unit not required.

## BIIS 1200 Compatible

The following selective calling and data features are available with the BIIS system.

- 32 abbreviated call memories
- 7 group IDs
- 24-status Messages
- 8-character SDM (Short Data Message)
- RS-232C interface
- Position data transmission with a GPS

## Waterproof microphone

An optional waterproof speaker-microphone, HM-138 provides reliable operation, even with the radio securely on your belt.

## Other features

• Built-in compander, compatible with the IC-F30G and IC-F520 series • 8 DTMF autodial memories • Powerful 5W output for IC-F50, 4W output for IC-F60 • Normal and priority scans • 2 step power saver • Optional AA alkaline battery case, BP-226 for battery back up • Busy, repeater lockout functions • Power ON password, and more...

## OPTIONS



**BP-226** BATTERY CASE: AA (R6)×5 alkaline cells. BP-226 is Water-resistant, equivalent to JIS Grade 4.

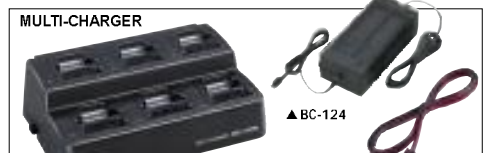
**BP-227** Li-Ion BATTERY PACK, 7.2V/1700mAh Provides 10 hours operating time\* (approx.). Operating temp. range: -20°C to +60°C; -4°F to +140°F. \* Tx: Rx: standby=5:5:90.



**BC-152** DESKTOP CHARGER + **BC-147A/E** AC ADAPTER Regularly charges the BP-227 in 9-10 hours.



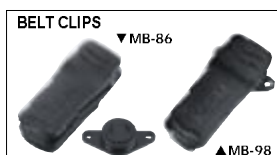
**BC-119N** DESKTOP CHARGER + **AD-100** CHARGER ADAPTER + **BC-145A/E/V** AC ADAPTER Rapidly charges the BP-227 in 2.5-3 hrs.



**BC-121N** MULTI-CHARGER + **AD-100** CHARGER ADAPTER + **BC-124** AC ADAPTER Rapid charges up to 6 battery packs (Six AD-100s are required) in 2.5-3 hours. **OPC-656** DC POWER CABLE; For use with the BC-121. (12-20V DC required).



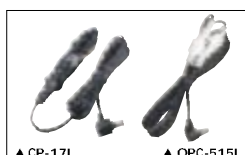
**HM-138** Full sized, waterproof construction corresponds to JIS Grade 7. (1 m/30 min.).



**MB-86**: Swivel type. Prevents accidental dropping from your belt. **MB-98**: Alligator type. Same as supplied.



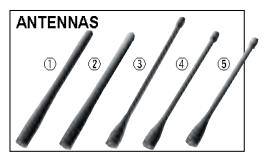
**MB-96F**: Leather belt hanger. For use with MB-98.



**CP-17L**: CIGARETTE LIGHTER CABLE **OPC-515L**: DC POWER CABLE For use with the BC-152 or BC-119N. (12-16V DC required)



**OPC-966**: RS-232C interface cable for connecting with a PC.



① **FA-S24V**: 136-150MHz (Blue ring)  
② **FA-S59V**: 150-174MHz (Red ring)  
③ **FA-S27U**: 400-470MHz (Green ring)  
④ **FA-S56U**: 450-520MHz (Red ring)  
⑤ **FA-S74U**: 490-520MHz (Blue ring)

SPECIFICATIONS

GENERAL	
• Frequency range	: IC-F50 136-174MHz IC-F60 400-470MHz 450-512MHz (U.S.A.) 450-520MHz (General)
• Number of Channels	: Max. 128 channels/ 8 banks
• Channel spacing	: 12.5/25kHz, 15/30kHz
• Antenna impedance	: 50Ω (SMA Type)
• Frequency error	: ±2.5ppm
• PLL channel step	: IC-F50 2.5/3.125kHz IC-F60 5/6.25kHz
• Power supply requirement	: 7.2V DC
• Current drain (approx)	: Transmit at 5W 1.5A (IC-F50) at 4W 1.5A (IC-F60) at 1W 0.7A (IC-F50) 0.8A (IC-F60)
Receive	AF max. 300mA Stand-by 85mA
• Operating temperature range	: -30°C to +60°C; -22°F to +140°F
• Dimensions (W × H × D)	: 56 × 97 × 36.4 mm ; (projections not included) 2 <sup>7</sup> / <sub>32</sub> × 3 <sup>9</sup> / <sub>16</sub> × 1 <sup>1</sup> / <sub>16</sub> in.
• Weight (approx.; With BP-227)	: 280g; 9.9oz

TRANSMITTER	
• Output power	: IC-F50 5.0W IC-F60 4.0W
• Modulation system	: Variable reactance frequency modulation
• Max. frequency deviation	: ±5kHz (wide) ±2.5kHz (narrow)
• Modulation limiting	: 60-100% of Max. deviation
• Audio harmonic distortion	: 3% typ. (AF 1kHz, 40% deviation)
• Spurious emissions	: 70dB Min.
• Adjacent channel power	: 70dB Min. (wide) 60dB Min. (narrow)
• FM Hum and Noise	: 46dB typ. (wide) 40dB typ. (narrow)
• External MIC impedance	: 9-pin multi connector/2.2kΩ

Measurements made in accordance with EIA-152C/204D, TIA-603.  
All stated specifications are subject to change without notice or obligation.

RECEIVER	
• Sensitivity	: 0.25μV typ. (at 12dB SINAD)
• Squelch sensitivity	: 0.25μV typ. (at threshold)
• Adjacent channel selectivity	: 75dB typ. (wide) 65dB typ. (narrow)
• Spurious response	: 70dB
• Intermodulation	: 74dB typ.
• Hum and noise	: 45dB typ. (wide) 40dB typ. (narrow)
• Audio output power	: 0.5W typ. at 5% distortion with an 8Ω load
• External SP connector	: 9-pin multi connector/8Ω

Applicable U.S. Military Specifications

Icom makes rugged products that meet MIL-STD requirements and strict environmental standards as follows.

Standard	MIL 810C		MIL 810D		MIL 810E		MIL 810F	
	Method	Proc.	Method	Proc.	Method	Proc.	Method	Proc.
Vibration	514.2	X	514.3	I	514.4	I	514.5	I
Shock	516.2	I, II, IV	516.3	I, IV	516.4	I, IV	516.5	I, IV

Supplied accessories:

- Antenna (Length may differ according to version)



- Alligator-type belt clip, MB-98
- Battery pack, BP-227

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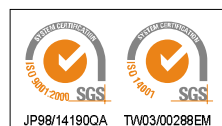
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