

ICOM

VHF AND UHF TRANSCEIVERS

**IC-F3S** VHF TRANSCEIVER

**IC-F4S** UHF TRANSCEIVER

Meets  
**MIL-STD 810**



### **Simple and flexible operation hides powerful functions**

● **Includes SmarTrunk II™ capability!**

The IC-F3S or IC-F4S employs SmarTrunk II™ capability\* for telephone interconnect and unit-to-unit calling, etc. Also, conventional mode with CTCSS and DTCS encode/decode is available for operation in out-of-service areas. Additionally, either 2-tone decode or 5-tone encode/decode is optionally available to meet a wide variety of signalling requirements in conventional mode.

\*Optional UT-105 is required.

● **Simple operation**

A portable radio that makes communication as simple as it should be! A minimum of switches and keys (no extensive keypad) put basic, day-to-day functions at your fingertips.

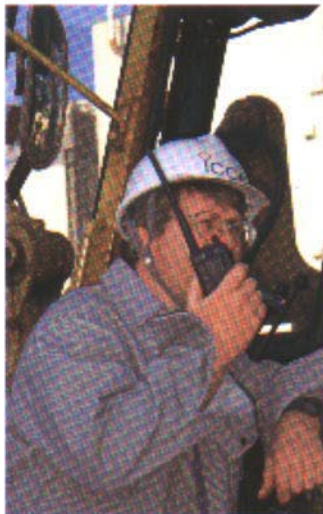
● **Dealer-programmable assign function**

Up to 7\* keys can be assigned functions, providing customized operation to suit your individual needs.

\*In SmarTrunk II™ mode; up to 5 in conventional mode.

● **And more...**

- Advanced programming capabilities via an IBM® PC
- Rugged, dependable construction
- Selectable LCD backlight condition: off, auto or continuously on
- Long life battery pack
- 2-step power save function
- Time-out timer (TOT)
- Password function
- Selectable 5-tone format
- 6 character alphanumeric display



▲ IC-F3S

▲ IC-F4S

**Icom Inc.**

## SPECIFICATIONS

GENERAL	
• Frequency coverage* (MHz)	IC-F3S 136-150 148-174 IC-F4S 400-490 440-470 470-500 490-512/520
• Mode	1BKDFSE (25 kHz type) 9K3DFSE (12.5 kHz type)
• PLL channel step	5 kHz, 8.25 kHz and 7.5 kHz
• Number of channels*	16 or 32 (16 or 7 tones)
• Power supply requirement	3.6 V DC (negative ground)
• Current drain (F3/F4)	Tx High power 1.3/1.4 A Rx Rated audio 250 mA Standby 60/65 mA
• Frequency stability	±0.005% (EIA) ±1500 Hz (ETS/CEPT)
• Oper. temp. range (F3S/F4S)	-25°C to +65°C (-20°C to +65°C (ETS/CEPT) -22°F to +140°F (EIA)
• Dimensions (w/ or w/o case, mm/in)	157(W) x 140(H) x 37(D) 216(W) x 510(H) x 112(D)
• Weight (w/ or w/o battery)	390 g (13.8 oz)

TRANSMITTER	
• Output power (at 3.6 V DC)	IC-F3S 5 W or 1 W IC-F4S 4 W or 1 W
• Modulator system	Variable reactance frequency modulation
• Max. frequency deviation	±5.0 kHz (25 kHz type) ±2.5 kHz (12.5 kHz type)
• Spurious emissions	70 dB (typical) (EIA) 0.25 μW (ETS/CEPT)
• Adjacent channel power	70 dB (25 kHz type) 60 dB (12.5 kHz type)
• External mic. connector	3-conductor 2.5 (jd) mm (7/8" x 12" x 2")

RECEIVER	
• Receive system	Double-conversion superheterodyne
• Intermediate freq. (IF3/IF4)	1st: 31,054/36.55 MHz 2nd: 450 kHz
• Sensitivity (typ. F3S/F4S)	0.25/0.3 μV for 12 dB S/N AD EMF: 20/30 dB AD
	0.63/0.78 μV

- Speech sensitivity (typ. F3S/F4S) 0.25/0.3 μV (at 10 dB SN)
- Adjacent channel selectivity: 70 dB (25 kHz type)  
50 dB (12.5 kHz type)
- Spurious response rejection: 70 dB
- Inter-modulation rejection: 50 dB
- Audio output power: 500 mW (typical, IC's  
at 3.6 V DC)
- External speaker connector: 3-conductor 2.5 (jd) mm  
(7/8" x 12" x 2")

## Applicable U.S. Military Specifications

ICOM makes rugged products that meet MIL-STD requirements and strict service contracts. Standards as follows:

Standard	MIL-STD-C		MIL-STD-D		MIL-STD-E	
	Method	Proc.	Method	Proc.	Method	Proc.
Env. Test	201	1	212	1, 2	212.5	1, 2
Hgt. Test	201	1	212	1, 2	212.5	1, 2
Low Temp	202	1	212	1, 2	212.5	1, 2
Temp. Shock	203	1	212	1	212.5	1
Shock	204	1	212	1	212.5	1
Power	205	1, 2	212	1, 2	212.5	1, 2
Vibration	206	1, 2	212	1, 2	212.5	1, 2
Salt Fog	208	1	212	1	212.5	1
Case	210	1	212	1	212.5	1
Welding	214.2	MIL-C	214.2	1	214.4	1
Stake	216.2	MIL-V	216.2	1, 2	216.4	1, 2

\*Values according to version.

Measurements made in accordance with EIA/TIA-162-C, 204D, 603 or ETS-300-036 or CEPT TR 24. All stated specifications are subject to change without notice or obligation.

## OPTIONS

## AD-98F5C ANTENNA CONNECTOR ADAPTER

Allows you to connect a BNC type antenna. (For radio transmits only)

## BC-110A/C/D/V WALL CHARGER

Used for regularly charging the connected battery pack.

## BC-121 MULTI-CHARGER - AD-81 CHARGER ADAPTER + BC-124 AC ADAPTER

For rapid charging of up to 6 battery packs (3 AD-81 units necessary). The BC-124 outputs 12 V DC and has 7.4 capacity for the BC-124. Charging time: 1.5 to 2 hrs.

## BC-133 BATTERY CHARGER

Rapidly charges a battery pack without the transceiver.

## BC-143 DESKTOP CHARGER

For rapid charging of battery packs. An AC adapter is supplied with the charger. Charging time: 1 to 1.5 hrs.

## BC-119 DESKTOP CHARGER is also available for rapid charging with AD-81 CHARGER ADAPTER.

## BP-194 BATTERY CASE; BP-195/BP-196 BATTERY PACKS

BP-194: Battery case for 4 AA's; BP-195: 9 batteries; BP-196: 9.6 V/700 mAh

## FA-5C56V5/FA-5C57V5/FA-5C73U5 STUBBY ANTENNAS

FA-5C56V5: 146-180 MHz; FA-5C57V5: 160-174 MHz; FA-5C73U5: 420-450 MHz

## HM-46/HM-75A/HM-131 SPEAKER MICROPHONES

HM-46: 3 in. diameter. Equipped with an omnidirectional and a directional microphone.

HM-75A: Allows you remote control operation. The [A], [V], [A], and [E] buttons, act as the [A], [V], [P], and [E] functions of the transceiver, respectively.

HM-131: Compact and durable design. Equipped with an earphone jack and a receiving clip.

## HM-128 EARPHONE MICROPHONE

The 1.8" weight sensitive mic. has a compact microphone with PTT switch that clips to your belt.

## HS-51 HEADSET; HS-94 EARHOOK-HEADSET; VS-1 VOX SWITCH CASE

HS-51: For hands-free operation. Includes VOX, PTT and tone lock PTT with a time-out timer.

HS-94: Flexible boom microphone and hearing element with a spring neckrest.

## MB-68/MB-74 BELT CLIPS

MB-68: Same as that supplied. MB-74: Alligator type clip.

## OPC-254AC DC POWER CABLE; PCP-124 CIGARETTE LIGHTER CABLE WITH NOISE FILTER

Allows you to charge a battery pack connected to the transceiver via a DC power source (12 x 18 V DC). For charging ONLY—the transceiver cannot be simultaneously operated.

## SP-13 EARPHONE

Provides clear audio in noisy environments.

## UT-80 2-TONE UNIT; UT-96 5-TONE UNIT

Provides the transceiver with 2-tone or 5-tone encoded voice capabilities.

## UT-105 SmartTrunk™ Logic Board

Provides SmartTrunk™ logic capabilities.

## UT-109/UT-110 VOICE SOFTAMPLER UNITS

UT-109: Non-singing type. UT-110: Singing type. Ask your dealer for details about audible warning, etc.

## UT-111 TRUNKING UNIT

Provides TRF trunking capability. Ask your local dealer for details about usage.



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