



# IC-F3S

# IC-F4S

VHF TRANSCEIVER

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

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## SPECIFICATIONS

## GENERAL

- Frequency coverage\* (MHz)
  - IC-F3S : 135-150 146-174
  - IC-F4S : 400-430 440-470
  - 470-500 490-512/520
- Mode
  - : 16K0F3E (25 kHz type)
  - 8K50F3E (12.5 kHz type)
- PLL channel step
  - : 5 kHz, 6.25 kHz and 7.5 kHz
- Number of channels\*
  - : 16 or 32 (16 ch × 2 banks)
- Power supply requirement
  - : 9.6 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
  - : ±0.0005% (EIA)
  - ±1500 Hz (ETS/CEPT)
- Oper. temp. range (F3S/F4S):
  - 25°C to +55°C/-20°C to +55°C (ETS/CEPT)
  - 22°F to +140°F (EIA)
- Dimensions
  - : 57(W) × 140(H) × 37(D)
  - (proj. not included; mm/in) 2 1/4(W) × 5 1/2(H) × 1 1/2(D)
- Weight (w/ant. and battery)
  - : 390 g (13.8 oz)

## TRANSMITTER

- Output power (at 9.6 V DC)
  - IC-F3S : 5 W or 1 W
  - IC-F4S : 4 W or 1 W
- Modulation 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 (d) mm (3/16")/2 kΩ

## RECEIVER

- Receive system
  - : Double-conversion superheterodyne
- Intermed. freq. (F3S/F4S)
  - 1st : 31.05/46.35 MHz
  - 2nd : 450 kHz

- Sensitivity (typ.: F3S/F4S)
  - for 12 dB SINAD : 0.25/0.3 µV
  - EMF; for 20 dB SINAD : 0.63/0.79 µV
- Squelch sensitivity (typ.: F3S/F4S): 0.25/0.3 µV (at threshold)
- Adjacent channel selectivity
  - : 70 dB (25 kHz type)
  - 60 dB (12.5 kHz type)
- Spurious response rejection
  - : 70 dB
- Intermodulation rejection
  - : 65 dB
- Audio output power
  - : 500 mW (typical at 10% distortion with an 8 Ω load)
  - (at 9.6 V DC)
- External speaker connector
  - : 3-conductor 3.5 (d) mm (1/8")/8 Ω

## 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	
	Method	Proc.	Method	Proc.	Method	Proc.
Vibration	514.2	X	514.3	I	514.4	I
Shock	516.2	I	516.3	I	516.4	IV

\*Varies according to version

Measurements made in accordance with EIA/TIA-152-C, 204D, 603 or ETS-300-086 or CEPT T/R 24. All stated specifications are subject to change without notice or obligation.

## OPTIONS

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

Used for regularly charging the connected battery pack.

## BC-119 DESKTOP CHARGER + AD-81 CHARGER ADAPTER

For rapid charging of battery packs. An AC adapter is supplied with the charger. Charging time: 1.5 to 2 hrs.

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

For rapid charging up to 6 battery packs simultaneously. An AC adapter may be supplied depending on version. Six AD-81's are necessary. Charging time: 1.5 to 2 hrs.

## BC-124 AC ADAPTER

Used for BC-121. Output voltage/current: 12 V/7 A

## BC-133 BATTERY CHARGER

Regularly charges a battery pack with/without transceiver.

## BP-194 BATTERY CASE

Battery case for AA(R6) × 8 batteries.

## BP-195/BP-196 BATTERY PACKS

BP-195: 9.6 V/700 mAh; BP-196: 9.6 V/1050 mAh

## HM-46 SPEAKER-MICROPHONE

Sim dimensions. Equipped with an earphone jack and a transmit indicator.

## HM-54 SPEAKER-MICROPHONE

For operation while conveniently hanging the transceiver from your belt, etc.

## HM-75A SPEAKER-MICROPHONE

Allows you to remotely select operating channels, etc.

## HS-51 HEADSET

For hands-free operation. Includes VOX, PTT and "one-touch" PTT with a time-out timer.

## MB-68 BELT CLIP

Allows you to attach the transceiver to your belt. Same as supplied.

## OPC-254L DC POWER CABLE

## CP-12L CIGARETTE LIGHTER CABLE WITH NOISE FILTER

Allows you to charge a battery pack connected to the transceiver via a DC power source (12 to 16 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

Provides the transceiver with 2-tone decode capability.

## UT-96 5-TONE UNIT

Provides the transceiver with 5-tone encode/decode capability.

## UT-105 SmarTrunk II™ Logic Board

Provides SmarTrunk II™ capabilities.

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

Provides operating security. Ask your local dealer for details about usable version, etc.

UT-109: Non-rolling type/UT-110: Rolling type



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