

Specifications for IC-705

General

Frequency coverage (Unit: MHz)	
Receiver	0.030–199.999* 400.000–470.000*
Transmitter	1.800–1.999
	3.500–3.999
	5.255–5.405*
	7.000–7.300
	10.100–10.150
	14.000–14.350
	18.068–18.168
	21.000–21.450
	24.890–24.990
	28.000–29.700
50.000–54.000	
144.000–148.000	
430.000–450.000	
Mode	USB, LSB, CW, RTTY, AM, DV, FM, WFM (Rx only)
No. of memory channels	Memory channels: 500 channels (100 groups) Scan edges: 25 channels Call channels: 4 channels (2 channels x 2 bands)
Antenna connector	BNC connector (50Ω)(One connector for all bands)
Power supply requirement	13.8 V DC ±15% (with external power supply) 7.4 V DC (with BP-272)
Operating temp. range	–10°C to +60°C; +14°F to +140°F
Frequency stability	Less than ± 0.5 ppm (–10°C to +60°C; 14°F to 140°F)
Frequency resolution	1 Hz
Current drain	13.8 V DC 7.4 V DC
Tx (Max. power)	Less than 3 A (10 W) Less than 2.5 A (5 W)
RX (Max. audio)	320 mA (typ.) 700 mA (typ.)
RX (Standby)	260 mA (typ.) 400 mA (typ.)
Dimensions	200x83.5x82 mm; 7.9x3.3x3.2 in (WxHxD, projections not included)
Weight	1.1 kg; 2.4 lb (approx.; including BP-272)

* Some frequency bands are not guaranteed.

Transmitter

Output Power	13.8 V DC 7.4 V DC
SSB/CW/RTTY/FM/DV	0.5 to 10 W 0.5 to 5 W
AM	0.25 to 2.5 W 0.25 to 1.5 W
Modulation system	SSB : Digital PSN modulation AM : Digital low power modulation FM : Digital phase modulation DV : GMSK digital phase modulation
Spurious emissions	Less than –50 dB (HF) Less than –60 dB (50 MHz) Less than –60 dB (144/430 MHz)
Carrier suppression	More than 50 dB
Unwanted sideband	More than 50 dB

Receiver

Receiver system	
0.030 to 24.999 MHz	RF Direct Sampling
25.000 MHz and above	Down Conversion IF Sampling
Intermediate frequencies	25.000 MHz and above : 38.85 MHz±0.5 MHz

Sensitivity (HF: Preamp-1 ON, 50 MHz: Preamp-2 ON, 144/430/440 MHz: Preamp ON)	0.500 to 1.799 MHz	1.800 to 29.999 MHz	50 MHz to 54 MHz	144/430/440 MHz
SSB/CW(10 dB S/N)	–	0.20 µV	0.15 µV	0.11 µV
AM(10 dB S/N)	13.0 µV	2.0 µV	1.0 µV	1.0 µV
FM (12 dB SINAD)	0.5 µV (28.000 to 29.700 MHz)		0.25 µV	0.18 µV
DV (1% BER) (PN9)	1.0 µV (28.000 to 29.700 MHz)		0.63 µV	0.35 µV

Selectivity (Filter: SHARP)

SSB(BW=2.4 kHz)	More than 2.4 kHz/-6 dB / Less than 3.4 kHz/-40 dB
CW(BW=500 Hz)	More than 500 Hz/-6 dB / Less than 700 Hz/-40 dB
RTTY(BW=500 Hz)	More than 500 Hz/-6 dB / Less than 800 Hz/-40 dB
AM(BW=6 kHz)	More than 6.0 kHz/-6 dB / Less than 10 kHz/-40 dB
FM(BW=15 kHz)	More than 12.0 kHz/-6 dB / Less than 20 kHz/-40 dB
DV(12.5 kHz spacing)	Less than -50 dB
Spurious and image rejection ratio	More than 70 dB (HF/50 MHz) More than 54 dB (144/440 MHz) (Except for ADC Aliasing)
Audio output power	
Internal SP	More than 530 mW (12Ω load at 10% distortion)
External SP	More than 200 mW (8Ω load at 10% distortion)

Supplied Accessories

- HM-243 Speaker-microphone
- BP-272 Battery pack
- OPC-2421 DC power cable