IC-7300

HF/50MHz TRANSCEIVER

SPECSIFICATIONS

GENERAL
Frequency coverage
Transmitter
HF: 0.500–29.999MHz, 30.000–54.000MHz
50MHz: 50.000–54.000MHz
Receiver
HF: 0.030–74.800MHz, 7.000–7.300MHz
50MHz: 1.800–1.999MHz, 3.500–3.999MHz
AM, FM, SSB, CW, RTTY, AM Digital
Bandwidth: 1200Hz

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

OPTIONS
PS-130 DC POWER SUPPLY
AH-4B HF+50MHz LINEAR AMPLIFIER
AH-5NV MOBILE MOUNTING BRACKET
HM-219 HAND MICROPHONE
AH-2b RF PAD OR ROUGH TUNER
AH-740 ANTIMICROPHONE
SM-50 MOBILE MOUNTING BRACKET
SM-30 DESKTOP MOUNTING BRACKET
IC-PW1 DESKTOP MICROPHONES

PS-130 DC POWER SUPPLY
10.8V DC, 50A max. output.

AH-4B HF+50MHz LINEAR AMPLIFIER
Covers 1.9–50MHz bands. Use with AH-740.

AH-5NV MOBILE MOUNTING BRACKET
Covers 2.5–30MHz (amateur band).

HM-219 HAND MICROPHONE
Aliases microphone, antenna element for use with RTTY. Comes in 50Ω (2m; 6.6ft cable).

AH-2b RF PAD OR ROUGH TUNER
Covers 3.5–54MHz with a 7m (23ft) or longer wire antenna.

AH-740 ANTIMICROPHONE
Covers 3.5–54MHz.

SM-50 MOBILE MOUNTING BRACKET
Covers 2.2–30MHz (amateur band).

SM-30 DESKTOP MOUNTING BRACKET
Covers 1.9–30MHz bands. Same as supplied.

IC-PW1 DESKTOP MICROPHONES
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Count on us!
Your local distributor/dealer:

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IC-7300 – The Innovative HF Transceiver with High Performance Real-Time Spectrum Scope

Class Leading Real-Time Spectrum Scope

The IC-7300’s real-time spectrum scope is class-leading in resolution, sweep speed and dynamic range. While listening to received audio, you can check the real-time spectrum scope and quickly move to an intended signal. When you first touch the scope screen around the intended signal, the touched part is magnified. A second touch of the scope screen changes the operating frequency and allows you to accurately tune.

Real-Time Spectrum Scope Specifications

- **Sweep system**: FFT (Fast Fourier Transform)
- **Sweep speed**: Max. 30 frames/second (approx.), Selectable from slow, mid or fast
- **Vertical axis**: VOL: 1/100 dB
- **Resolution*: 1 pixel minimum (approximately)
- **Waveform display area**: Vertical axis
  - **Select**: 256 pixels or 512 pixels
- **Reference level adjustment**: ON/OFF or 3 dB
- **Reference level adjustment**: ON/OFF or 3 dB
- **Other functions**: Averaging indication, Vertical axis

*Number of pixels shown at the 0dB level, when receiving a signal.

High-Resolution Waterfall Function

The combination of the waterfall function and the real-time spectrum scope assists in maximum receive performance of the IC-7300 and increases QSO opportunities without missing weak signals. The waterfall function shows a change of signal strength over a period of time and allows you to find weak signals that may not be apparent on the spectrum scope.

Audio Scope Function

The audio scope function can be used to observe various AF characteristics such as microphone compressor level, filter width, notch filter width and keying waveform in the CW mode. Either the transmit or receive audio can be displayed on the FFT scope with the waterfall function and the oscilloscope.

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**RF Direct Sampling System**

The IC-7300 employs an RF direct sampling system. RF signals are directly converted to digital data and processed in the FPGA (Field-Programmable Gate Array), making it possible to simplify the circuit construction. This system is a leading technology making an epoch in amateur radio.

**New “IP+” Function**

The new “IP+” function improves 3rd order intercept point (IP3) performance. When a weak signal is received adjacent to strong interference, the AD converter is optimized against signal distortion.

**Class Leading RMDR and Phase Noise Characteristics**

The IC-7300’s RMDR is improved to about 97dB* (typical value) and Phase Noise characteristics are improved about 15dB (at 1 kHz frequency separation) compared to the IC-7200. The superior Phase Noise characteristics reduce noise components in both receive and transmit signals.

**15 Discrete Band-Pass Filters**

The IC-7300 has 15 discrete RF band-pass filters. The RF signal is only passed through one of the band-pass filters, while any out of range signals are rejected. High Q factor coils are used to minimize the loss in the RF band-pass filters.

**Built-In Automatic Antenna Tuner**

The antenna tuner memorizes its settings based on your transmit frequency, so that it can rapidly tune when you change operating bands. The Enforced Tuning function* allows a wide range of temporary antennas to be tuned.

**SD Memory Card Slot for Saving Data**

The IC-7900 can store various content on an SD card such as received and transmitted audio, voice memories, RTTY/CW memories, RTTY decode logs and captured screen images. Personal and firmware update data can also be stored on the SD card for easy setting.

**Large Touch Screen Color TFT LCD**

The large 4.3 inch color TFT touch LCD offers intuitive operation. Using the software keypad of the touch screen, you can easily set various functions and edit memory contents.

**Multi-Dial Knob for Smooth Operation**

The combination of the multi-dial knob and the touch screen offers quick and smooth operation. When you push the multi-dial knob, menu items are shown on the right side of the display. You can select an item with a touch of the screen and adjust levels by turning the multi-dial knob.

**Superior Sound Quality**

To offer superior sound quality, a new speaker unit has been incorporated and is allocated dedicated space in the aluminum die-cast chassis.

**Other features**

- New HM-219 hand microphone supplied
- A large and effective cooling fan system
- A multi-function meter
- 101 memory channels (99 regular, 2 scan edges)
- Optional RS-BA1 IP remote control software (the spectrum scope with the waterfall can be observed)
- CW functions: Full-break-in, CW reverse, CW auto tuning