#### HF/50/70MHz TRANSCEIVER

GENERAL							
Frequency covera	ge	(Unit: MHz)					
Receiver*1		0.030-74.800*2					
Transmitter*1		1.800–1.999, 3.500–3.800, 7.000–7.200, 10.100–10.150, 14.000–14.350, 18.068–18.168, 21.000–21.450, 24.890–24.990, 28.000–29.700, 50.000–52.000, 70.000–70.500					
*1 70 MHz band is *2 Guaranteed ran	for EUR versio	n. Each freque	ency range is di	ffer according t			
Mode	90.0.000 20.	SSB, CW, RT					
Number of channels		101 (99 regular, 2 scan edges)					
Antenna connector		SO-239 (50Ω)					
Power supply requirement		13.8V DC ±15%					
Power consumption		21A (at 100W output power)					
' Hx		0.9A typical (Standby), 1.25A (Maximum audio)					
Operating temperature range		$-10^{\circ}$ C to $+60^{\circ}$ C; $14^{\circ}$ F to $140^{\circ}$ F					
Frequency stability		Less than ±0.5ppm (-10°C to +60°C; 14°F to 140°F) 1Hz					
Frequency resolution Dimensions (W×H×D)		240x94x238mm; 9.45x3.7x9.37in (projections not included)					
Weight (approxima	ately)	4.2kg; 9.26lb	at monuted)				
TRANSMITTER	3						
Output SSB, CW, FM, RTTY		2–100W (HF/50MHz), 2–50W (70MHz)					
power AM		1–25W (HF/50MHz), 1–12.5W (70MHz)					
Modulation system	SSB	Digital P.S.N. modulation					
	FM	Digital Low power modulation Digital Reactance modulation					
	HF bands	Less than -500		1			
Spurious emissions							
		Less than -600					
Carrier suppressio	on	More than 50dB					
Unwanted sideband		More than 50dB					
Microphone imped	lance	600Ω					
RECEIVER							
		Direct Occurs 11	an Cumanta ata	du un e			
Receiver system	lency		ng Superhetero	dyne			
Receiver system Intermediate frequ	lency	36kHz			70MHz bands		
Receiver system Intermediate frequ Sensitivity* <sup>3</sup>		36kHz	1.8-29.995MHz	50MHz band			
Receiver system Intermediate frequ Sensitivity* <sup>3</sup>	(at 10dB S/N)	36kHz	1.8– 29.995MHz 0.16µV 2.0µV		70MHz bands 0.16μV 1.0μV		
Receiver system Intermediate frequ Sensitivity* <sup>3</sup> <u>SSB/CW</u> <u>AM (at 10</u> FM (at 12	(at 10dB S/N) 0dB S/N) 2dB SINAD)	36kHz 0.5– 1.8MHz – 12.6µV –	1.8-29.995MHz 0.16μV	50MHz band 0.13µV	0.16µV		
Receiver system Intermediate frequ Sensitivity*3 <u>SSB/CW</u> <u>AM (at 10</u> FM (at 12 *3 HF: Preamp 1 O	(at 10dB S/N) 0dB S/N) 2dB SINAD) N, 50/70MHz:	36kHz 0.5– 1.8MHz – 12.6µV – Preamp 2 ON	1.8– 29.995МНz 0.16µV 2.0µV 0.5µV (28.0– 29.7MHz)	50MHz band 0.13μV 1.0μV 0.25μV	0.16μV 1.0μV 0.25μV		
Receiver system Intermediate frequ Sensitivity*3 <u>SSB/CW</u> <u>AM (at 10</u> FM (at 12 *3 HF: Preamp 1 O Squelch sensitivity	(at 10dB S/N) 0dB S/N) 2dB SINAD) N, 50/70MHz: *3 (Threshold)	36kHz 0.5– 1.8MHz – 12.6µV – Preamp 2 ON SSB: Less tha	1.8– 29.995МНz 0.16µV 2.0µV 0.5µV (28.0– 29.7MHz)	50MHz band 0.13μV 1.0μV 0.25μV	0.16μV 1.0μV 0.25μV		
Receiver system Intermediate frequ Sensitivity <sup>+3</sup> <u>SSB/CW</u> AM (at 10 FM (at 12 * <sup>3</sup> HF: Preamp 1 O Squelch sensitivity * <sup>3</sup> HF: Preamp 1 O	(at 10dB S/N) 0dB S/N) 2dB SINAD) 1N, 50/70MHz: * <sup>3</sup> (Threshold) 1N, 50/70MHz:	36kHz 0.5– 1.8MHz – 12.6µV – Preamp 2 ON SSB: Less tha Preamp 2 ON	1.8–29.995МНz 0.16µV 2.0µV 0.5µV (28.0–29.7МНz) n 5.6µV, FM: Le	50MHz band 0.13μV 1.0μV 0.25μV ess than 0.3μV	0.16μV 1.0μV 0.25μV		
Receiver system Intermediate frequ Sensitivity*3 <u>SSB/CW</u> AM (at 10 FM (at 12 *3 HF: Preamp 1 O Squelch sensitivity *1 HF: Preamp 1 O Selectivity (sharp	(at 10dB S/N) 0dB S/N) 2dB SINAD) N, 50/70MHz: *3 (Threshold) N, 50/70MHz: filter shape)	36kHz 0.5– 1.8MHz – 12.6µV – Preamp 2 ON SSB: Less tha Preamp 2 ON More	1.8–29.995МНz 0.16µV 2.0µV 0.5µV (28.0–29.7МНz) n 5.6µV, FM: Le e than	50MHz band 0.13µV 1.0µV 0.25µV ess than 0.3µV	0.16μV 1.0μV 0.25μV		
Receiver system Intermediate frequ Sensitivity <sup>*3</sup> <u>SSB/CW</u> AM (at 10 FM (at 12 *3 HF: Preamp 1 O Squelch sensitivity *3 HF: Preamp 1 O Selectivity (sharp 1 <u>SSB (BW</u>	(at 10dB S/N) 2dB S/N) 2dB SINAD) 1N, 50/70MHz: * <sup>3</sup> (Threshold) 1N, 50/70MHz: filter shape) <i>J</i> : 2.4KHz)	36kHz 0.5- 1.8MHz - 12.6µV - Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kHz	1.8-29.995МHz 0.16µV 2.0µV 0.5µV (28.0-29.7МHz) n 5.6µV, FM: Le e than z/-6dB	50MHz band 0.13μV 1.0μV 0.25μV ess than 0.3μV Less 3.4kHz	0.16µV 1.0µV 0.25µV e than		
Receiver system Intermediate frequ Sensitivity <sup>+3</sup> AM (at 10 FM (at 12 * <sup>3</sup> HF: Preamp 1 O Squelch sensitivity * <sup>3</sup> HF: Preamp 1 O Selectivity (sharp <u>SSB (BW</u> <u>CW (BW</u>	(at 10dB S/N) 0dB S/N) 2dB SINAD) 2dB SINAD) 10, 50/70MHz: 11, 50/70MHz: 11, 50/70MHz: 11, 2, 4KHz) 12, 2, 4KHz) 13, 200Hz)	36kHz 0.5–1.8MHz – 12.6µV – Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kH: 500Hz	1.8–29.995МНz 0.16µV 2.0µV 0.5µV (28.0–29.7МНz) n 5.6µV, FM: Le e than	50MHz band 0.13µV 1.0µV 0.25µV ess than 0.3µV Less 3.4kHz 700Hz	0.16μV 1.0μV 0.25μV		
Receiver system Intermediate frequ Sensitivity <sup>+3</sup> AM (at 10 FM (at 12 * <sup>3</sup> HF: Preamp 1 O Squelch sensitivity * <sup>3</sup> HF: Preamp 1 O Selectivity (sharp <u>SSB (BW</u> <u>CW (BW</u>	(at 10dB S/N) )dB S/N) )dB S/N) )dB SINAD) N, 50/70MHz: * <sup>3</sup> (Threshold) N, 50/70MHz: filter shape) filter shape) 500Hz) W: 500Hz)	36kHz 0.5- 1.8MHz - - Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kH; 500Hz	1.8-29.995MHz 0.16µV 2.0µV 0.5µV (28.0-29.7MHz) n 5.6µV, FM: Le e than z/-6dB z/-6dB	50MHz band 0.13µV 1.0µV 0.25µV ess than 0.3µV Less 3.4kHz 700Hz 800Hz	0.16µV 1.0µV 0.25µV s than /-40dB		
Receiver system Intermediate frequ Sensitivity*3 AM (at 10 FM (at 12 *3 HF: Preamp 1 O Squelch sensitivity *3 HF: Preamp 1 O Selectivity (sharp ) SEB (BW <u>CW (BW:</u> RTTY (B	(at 10dB S/N) 0dB S/N) 2dB SINAD) N, 50/70MHz: *3 (Threshold) N, 50/70MHz: 500Hz) 5 500Hz) W: 500Hz) 6kHz)	36kHz 0.5- 1.8MHz - 12.6µV - Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kH 500H; 500H; 12.0kH	1.8-29.995MHz 0.16µV 2.0µV 0.5µV (28.0-29.7MHz) n 5.6µV, FM: Lo a than z/-6dB z/-6dB z/-6dB z/-6dB	50MHz band 0.13µV 1.0µV 0.25µV ess than 0.3µV Less 3.4kHz 700Hz 800Hz 10kHz	0.16µV 1.0µV 0.25µV 0.25µV than /-40dB /-40dB /-40dB		
Receiver system Intermediate frequ Sensitivity*3 <u>SSB/CW</u> AM (at 10 FM (at 12 *3 HF: Preamp 1 O Squelch sensitivity shF: Preamp 1 O Selectivity (sharp 1 SSB (BW) CW (BW: <u>RTTY (B</u> AM (BW: FM (BW:	(at 10dB S/N) 0dB S/N) 2dB SINAD) N, 50/70MHz; *3 (Threshold) N, 50/70MHz; 5 (500Hz) W; 500Hz) W; 500Hz) 6kHz) 15kHz)	36kHz 0.5– 1.8MHz – – Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kH; 500H; 500H; 6.0kH; HF: More thar	1.8-29.995MHz 0.16µV 2.0µV 0.5µV (28.0-29.7MHz) n 5.6µV, FM: Le 2than z/-6dB z/-6dB z/-6dB z/-6dB z/-6dB	50MHz band 0.13μV 1.0μV 0.25μV ess than 0.3μV Less 3.4kHz 700Hz 800Hz 10kHz 22kHz	0.16µV 1.0µV 0.25µV ithan /-40dB /-40dB /-40dB /-40dB		
Receiver system Intermediate frequ Sensitivity*3 SSB/CW AM (at 10 FM (at 12 *3 HF: Preamp 1 O Squelch sensitivity *3 HF: Preamp 1 O Selectivity (sharp 1 SSB (BW CW (BW: SSB (BW CW (BW: FM (BW: Spurious and image Audio output powe	(at 10dB S/N) odB S/N) cdB SINAD) N, 50/70MHz; *3 (Threshold) N, 50/70MHz; 5 (500Hz) W; 500Hz) 6 (KHz) 15 (KHz) 9 (rejection ratio	36kHz 0.5- 1.8MHz - - Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kH; 500Hz 6.0kH; 12.0kH HF: More tham 50/70MHz; Mc	1.8-29.995MHz 0.16µV 2.0µV 0.5µV (28.0-29.7MHz) n 5.6µV, FM: Lo a than z/-6dB z/-6dB z/-6dB z/-6dB	50MHz band 0.13µV 1.0µV 0.25µV ess than 0.3µV Less 3.4kHz 700Hz 800Hz 10kHz 22kHz Except for ADC	0.16µV 1.0µV 0.25µV e than /-40dB /-40dB /-40dB /-40dB /-40dB /-40dB /-40dB /-40dB		
Receiver system Intermediate frequ Sensitivity*3 SSB/CW AM (at 10 FM (at 12 *3 HF: Preamp 1 O Squelch sensitivity *3 HF: Preamp 1 O Selectivity (sharp 1 SSB (BW CW (BW; RTTY (B AM (BW; FM (BW; Spurious and image Audio output powe TUNER	(at 10dB S/N) odB S/N) cdB SINAD) N, 50/70MHz; *3 (Threshold) N, 50/70MHz; 5 (500Hz) W; 500Hz) 6 (KHz) 15 (KHz) 9 (rejection ratio	36kHz 0.5–1.8MHz - 12.6µV - Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kH 500Hz 500Ht 12.0kH HF: More than 50/70MHz: Mc	1.8-29.995MHz 0.16µV 2.0µV 0.5µV (28.0-29.7MHz) n 5.6µV, FM: Le than z/-6dB z/-6dB z/-6dB z/-6dB z/-6dB z/-6dB z/-6dB v/ GB v/ GB v	50MHz band 0.13µV 1.0µV 0.25µV ess than 0.3µV Less 3.4kHz 700Hz 800Hz 10kHz 22kHz Except for ADC	0.16µV 1.0µV 0.25µV e than /-40dB /-40dB /-40dB /-40dB /-40dB /-40dB /-40dB /-40dB		
Receiver system Intermediate freques Sensitivity <sup>+3</sup> AM (at 10 FM (at 12 * <sup>3</sup> HF: Preamp 1 O Squelch sensitivity * <sup>3</sup> HF: Preamp 1 O Selectivity (sharp SSB (BW, CW (BW; RTTY (B) AM (BW; FM (BW; Spurious and image Audio output pows Functional for the formation and the formation Frequency range	(at 10dB S/N) 0dB S/N) 2dB SINAD) N, 50/70MHz: **3 (Threshold) N, 50/70MHz; (Threshold) N, 50/70MHz; (Threshold) N, 50/70MHz; 500Hz) W: 500Hz) 6kHz) 15kHz) e rejection ratio er	36kHz 0.5– 1.8MHz – – Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kH; 500H; 500H; 6.0kH; 12.0kH HF: More than 2.5 1.9–70MHz ba	1.8-29.995MHz 0.16µV 2.0µV 0.5µV (28.0-29.7MHz) in 5.6µV, FM: Le than z/-6dB z	50MHz band 0.13µV 1.0µV 0.25µV ess than 0.3µV ess than 0.3µV Less 3.4kHz 700Hz 800Hz 10kHz 22kHz Except for ADC triion with an 8	0.16μV 1.0μV 0.25μV ithan /-40dB /-4		
Receiver system Intermediate frequ Sensitivity*3 SSB/CW AM (at 10 FM (at 12 *3 HF: Preamp 1 O Squelch sensitivity shF: Preamp 1 O Selectivity (sharp 1 SSB (BW CW (BW: RTTY (B AM (BW: FM (BW: Spurious and image Audio output powe TUNER Frequency range Matching impedar	(at 10dB S/N) 0dB S/N) 2dB SINAD) N, 50/70MHz: **3 (Threshold) N, 50/70MHz; (Threshold) N, 50/70MHz; (Threshold) N, 50/70MHz; 500Hz) W: 500Hz) 6kHz) 15kHz) e rejection ratio er	36kHz 0.5– 1.8MHz – 12.6μV – Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kH; 500Hz 500Hz 500Hz 6.0kH 12.0kH HF: More than 2.5 1.9–70MHz ba 1.9–70MHz ba 1.9–70Mz ba	1.8-29.995MHz 0.16µV 2.0µV 0.5µV (28.0-29.7MHz) in 5.6µV, FM: Le e than z/-6dB	50MHz band 0.13µV 1.0µV 0.25µV ess than 0.3µV ess than 0.3µV Less 3.4kHz 700Hz 800Hz 10kHz 22kHz Except for ADC triion with an 8	0.16μV 1.0μV 0.25μV ithan /-40dB /-4		
Receiver system Intermediate freques Sensitivity <sup>+3</sup> AM (at 10 FM (at 12 * <sup>3</sup> HF: Preamp 1 O Squelch sensitivity * <sup>3</sup> HF: Preamp 1 O Selectivity (sharp SSB (BW, CW (BW; RTTY (B) AM (BW; FM (BW; Spurious and image Audio output pows Functional for the formation and the formation Frequency range	(at 10dB S/N) odB S/N) edB SINAD) N, 50/70MHz: *3 (Threshold) N, 50/70MHz: 500Hz) W: 500Hz) 6kHz) 15kHz) a rejection ratio er ace range	36kHz 0.5-1.8MHz - 12.6μV - Preamp 2 ON SSB: Less tha Preamp 2 ON SSB: Less tha Preamp 2 ON More 2.4kH 500Hz 500Hz 50/70MHz ba 1.9-70MHz ba 1.6-70-150Ω u VSWR 1: 1.5 c	1.8-29.995MHz 0.16µV 2.0µV 0.5µV (28.0-29.7MHz) in 5.6µV, FM: Le e than z/-6dB	50MHz band 0.13µV 1.0µV 0.25µV ess than 0.3µV Less 3.4kHz 700Hz 800Hz 10kHz 22kHz Except for ADC rtion with an 8 WR better than	0.16μV 1.0μV 0.25μV than /-40dB /-4		

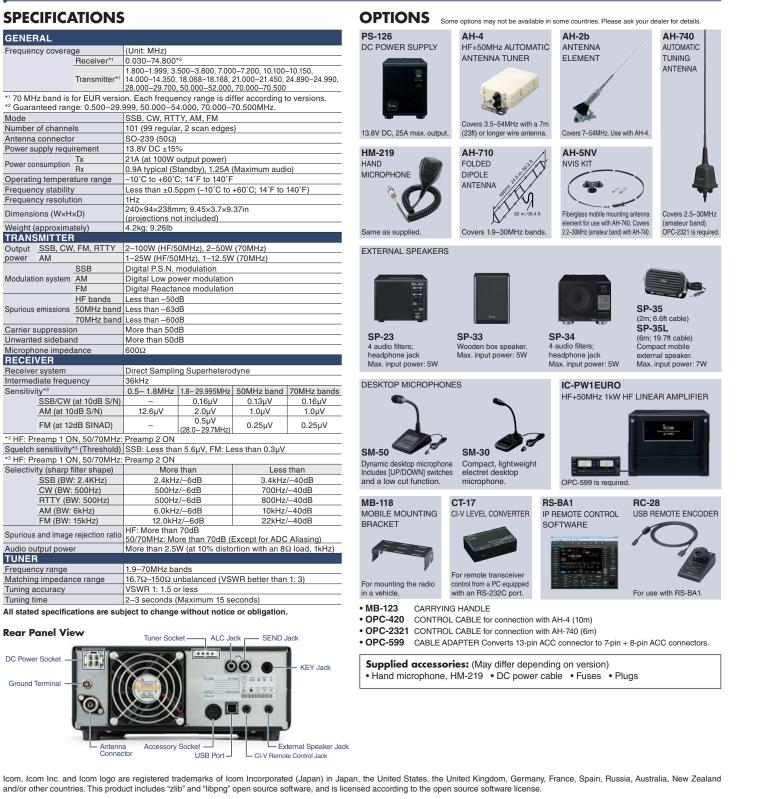
Accessory Socket

Phone: +44 (0) 1227 741741 Fax: +44 (0) 1227 741742 E-mail: info@icomuk.co.uk URL: http://www.icomuk.co.uk

CEP: 30720-450, Brazil Phone: +55 (31) 3582 8847 Fax: +55 (31) 3582 8987 E-mail: sales@icombrazil.cc

USB Port

CI-V Remote Control Jack



IC-7300

Icom Inc. 1-1-32, K	ami-minami, Hirano-Ku, Osaka 547-0003, J	apan Phone: +81 (06) 6793 5302 Fax	+81 (06) 6793 0013 <b>www.icom</b>	.co.jp/world	Count on us!
Icom America Inc.           12421 Willows Road NE,           Kirkland, WA 98034, U.S.A.           Phone: +1 (425) 454-8155           Fax: +1 (425) 454-1509           E-mail: sales@icomamerica.com           URL: http://www.icomamerica.com	Icom (Europe) GmbH Communication Equipment Auf der Krautweide 24 65812 Bad Soden am Taunus, Germany Phone: +49 (6196) 76685-0 Fax: +49 (6196) 76685-50 E-mail: into®(comeurope.com URL: http://www.icomeurope.com	Icom France s.a.s. Zac de la Plaine, 1 Rue Brindejonc des Moulinais, BP 45804, 31505 Toulouse Cedex 5, France Phone: -33 (5) 61 36 03 00 Fax: +33 (5) 61 36 03 00 E-mail: icom@icom-france.com URL: http://www.icom-france.com	Asia Icom Inc. 6F No. 68, Sec. 1 Cheng-Teh Road, Taipei, Taiwan, R.O.C. Phone: +886 (02) 2559 1899 Fax: +886 (02) 2559 1874 E-mail: sales @asia-icom.com URL: http://www.asia-icom.com	Your local di	stributor/dealer:
Icom Canada	Icom Spain S.L.	Icom (Australia) Pty. Ltd.	Shanghai Icom Ltd.		
Glenwood Centre #150-6165 Highway 17A, Delta, B.C., V4K 5B8, Canada Phone: +1 (604) 952-4266 Fax: +1 (604) 952-0090 E-mail: info@icomcanada.com URL: http://www.icomcanada.com	Ctra. Rubi, No. 88 "Edificio Can Castanyer" Bajos A 08174, Sant Cugat del Valles, Barcelona, Spain Phone: +34 (93) 590 26 70 Fax: +34 (93) 589 04 46 E-mail: com@icomspain.com URL: http://www.icomspain.com	Unit 1 / 103 Garden Road, Clayton, VIC 3168 Australia Phone: +61 (03) 9549 7500 Fax: +61 (03) 9549 7505 E-mail: sales@icom.net.au URL: http://www.icom.net.au	No. 101, Building 9, Caifuxingyuan Park, No. 188 Maoting Road, Chedun Town, Songijang District, Shanghai, 201611, China Phone: +86 (021) 6153 2768 Fax: +86 (021) 5765 9987 E-mail: bjicom@bjicom.com URL: http://www.bjicom.com		
Icom Brazil	Icom (UK) Ltd.	Icom New Zealand			
Rua Itororó, 444 Padre Eustáquio Belo Horizonte MG	Blacksole House, Altira Park, Herne Bay, Kent, CT6 6G7, UK	39C Rennie Drive, Airport Oaks, Auckland, New Zealand			

Phone: +64 (09) 274 4062 Fax: +64 (09) 274 4708 E-mail: inquiries@icom.co.nz URL: http://www.icom.co.nz

# ICOM

# Revolutionary

**The Real HF Fun Starts Here** 



## HF/50/70MHz TRANSCEIVER IC-7300

## 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 classleading in resolution, sweep speed and dynamic range. While listening to received audio, you can check the real-time spectrum scope and guickly 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

Scope system	FFT (Fast Fourier Transform)		
Sweep speed	Max. 30 frames/second (approx.), Selectable from slow, mid or fast		
Span width	5kHz–1000kHz		
Resolution*	1 pixel minimum (approximately)		
Waveform display area (vertical axis)	80dB		
Reference level adjustment	–20dB to +20dB		
Peak level hold function (Max. hold)	ON/OFF/last 10 seconds		
Other functions	<ul> <li>Averaging indication</li> <li>Touch screen operation</li> <li>VBW (Video Band Width) adjustment</li> </ul>		
* Number of nivels shown at the 60dB 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 func- FFT scope/Oscilloscope tion and the oscilloscope.



FIL 2

7.073.00

<1> EDGE HOLD CENT/FIX EXPD/SET

Spectrum scope + Waterfall



HF/50/70MHz TRANSCEIVER IC - 7300

### **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.

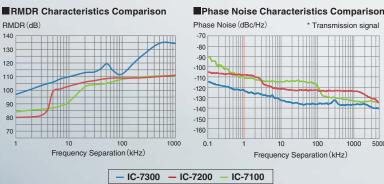
#### New "IP+" Function

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 (Reciprocal Mixing Dynamic Range) 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.

\* At 1 kHz frequency separation (received frequency: 14.2MHz, MODE: CW, IF BW: 500Hz)



#### Large Touch Screen Colour TFT LCD

The large 4.3 inch colour 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.



Multi-dial Knoh

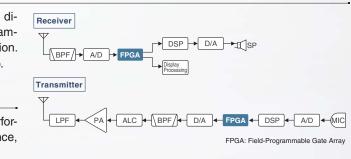
I

Menu screer

## **SD Memory Card Slot for Saving Data**

The IC-7300 can store various contents into SD card such as received and transmitted audio, voice memories, RTTY/CW memories, RTTY decode logs and captured screen images. Personal and firmware updating data can also be stored to the SD card for easy setting.

Actual size



#### **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 temporarv antennas to be tuned.



\* Do not use the Enforced Tuning function except in case of an emergency Transmission power may be reduced.

#### **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 chas





#### Other features

- New HM-219 hand microphone supplied
- · Effective large 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