ICOM

AVIATION RADIOS

VHF Air Band Transceiver

IC-A220 TSO version

TSO APPROVED

High-Quality Panel Mount Radio with TSO Certification

- TSO certified to be used as a primary VHF radio in general aviation (Part 23) aircraft (Certified TSO C128a and C169a)
- The IC-A220 TSO version is also accepted as an ETSO radio under the TSO/ETSO reciprocal acceptance policy
- High visibility OLED (Organic Light Emitting Diode) screen
- Easy channel selection with large "Flip-Flop" arrow button
- Auto squelch function and quick squelch adjustment
- Quick squelch adjustment with the Volume knob
- Auto dimmer function and external dimmer control
- Intercom function

VHF Air Band Transceiver*1

IC-A220

Ideal Communication Tool for Your Experimental/Light Sport Aircraft or Ground Use

- High visibility OLED (Organic Light Emitting Diode) screen
- GPS memory function*2 for transmitting frequency data of nearby airports
- Easy channel selection with large
- "Flip-Flop" arrow button
- Auto squelch function and quick squelch adjustment
- Auto dimmer function and external dimmer control
- Intercom function
- Optional PS-80 power supply for desktop use

*1 Not available for European Market.

*2 External GPS receiver required.

VHF Air Band Transceivers

IC-A120
IC-A120E*

Enhanced Ground Crew Communications

- Full dot-matrix display, simple operation
- Optional Bluetooth® headset connectivity
- Active Noise Cancelling (ANC) for background noise reduction
- IP54 dust-protection and water resistance
- ON-hook scan function
- Optional speaker-microphone, HM-217 with two programmable buttons

IC-A120*

IC-A120E

* Not available for European Market.

IC-A25C*1

IC-A25NE

VHF Air Band Transceivers

IC-A25N/IC-A25C*1
IC-A25NE/IC-A25CE

6 W (PEP) Powerful Air Band Radio with Built-in GPS and Bluetooth® Capability

- Built-in GPS with simplified waypoint NAV (Direct-To NAV and Flight Plan NAV)*2
- Flight plans with iOS™ app RS-AER01I*2
- VOR navigation functions*2
- Near station search function*2
- Class-leading 6 W typical (PEP) and 1.8 W typical (carrier) high power RF output
- Easy-to-use interface
- 2.3 inch large high-visibility LCD with night mode
- "Flip-Flop" channel recall
- Bluetooth® capability for hands-free operation (IC-A25N/NE)
- Intelligent battery with detailed battery status
- 25 kHz/8.33 kHz dual channel spacing

IC-A25N/IC-A25C*1

IC-A25NE/IC-A25CE*2

*1 Not available for European Market.
*2 Available in IC-A25N/IC-A25NE.

IC-A16E

VHF Air Band Transceivers

IC-A16*1
IC-A16E

Class Leading 1500 mW Powerful Audio with a Compact Body

- 8.33 kHz and 25 kHz channel spacing
- 1500 mW loud audio provides clear communications
- 6 W (PEP) /1.8 W (carrier) RF output power
- Bluetooth® capability for Hands-Free operation*2
- Large capacity battery pack provides 17 hours*3 of long battery life
- Compact, waterproof and durable body (IP67/IP54 and MIL-STD-810-G)
- LCD and key backlight for night time operation
- Compatible*4 with third-party aviation headsets

*1 Not available for European Market.
*2 Bluetooth® operation depends on the transceiver version.
*3 With BP-280. Typical operation with TX : RX : Standby = 5:5:90. (Bluetooth® OFF, backlight OFF)
*4 Optional headset adapter OPC-2401 required.

IC-A16*1

IC-A16E

The VE-PG4 RoIP (Radio over IP) gateway device provides a seamless connection between different communication systems, enabling unified communications across analogue radios, digital radio networks, IP-based systems and telephony infrastructure. This versatile solution bridges the gap between legacy radio equipment and modern IP networks, enabling organisations to maximise their existing communication investments while expanding interoperability.

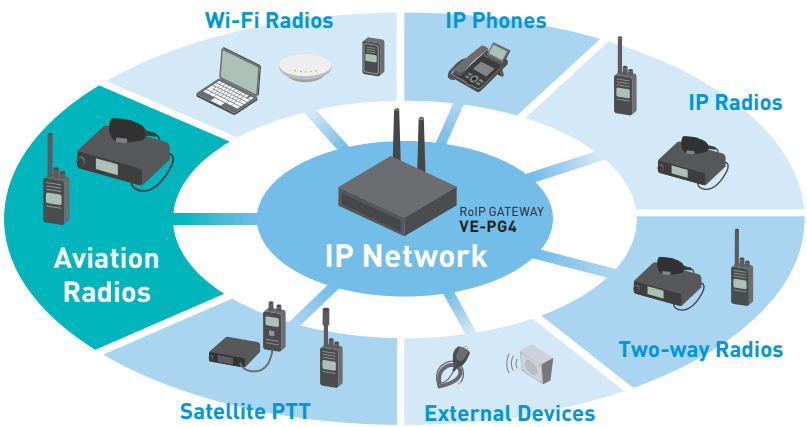
RoIP Gateway

VE-PG4

Radio over IP Network Gateway

- Links land mobile radios, Wi-Fi transceivers, LTE transceivers, IP phone systems and external devices
- Wi-Fi transceiver controller built-in, capable of controlling up to 50 Wi-Fi transceivers

Aviation Radios with Communication Links



Specifications

Handheld Transceivers

		IC-A25N*3 IC-A25C*3	IC-A25NE IC-A25CE	IC-A16*3	IC-A16E
NAV/COM channels		VOR NAV & COM (IC-A25N) COM (IC-A25C)	VOR NAV & COM (IC-A25NE) COM (IC-A25CE)	COM	COM
Built-in GPS		● (IC-A25N)	● (IC-A25NE)		
Bluetooth®		● (IC-A25N)	● (IC-A25NE)	● (Depending on the version)	
IP rating		IP57	IP57	IP67/IP54	
Flip-flop channel recall		●	●		
MIL-STD 810		● (G)	● (G)	● (G)	● (G)
iOS™ app for flight planning		● (IC-A25N)	● (IC-A25NE)		
Frequency range (unit: MHz)	TX	118.000 ~ 136.992		118.000 ~ 136.992	
	RX	IC-A25N 108.000 - 136.992 IC-A25C 118.000 - 136.992 161.650 ~ 163.275 (Weather)	IC-A25NE 108.000 - 136.992 IC-A25CE 118.000 - 136.992	108.000 ~ 136.992 161.650 ~ 163.275 (Weather)	118.000 ~ 136.992
Number of memory channels		300 channels (15 groups)		200 channels (10 groups)	
Channel spacing*1		25 kHz/8.33 kHz		25 kHz/8.33 kHz	
Power supply requirements		7.2 V DC (BP-288) 11.0 V DC (External DC jack)		7.2 V DC (BP-280)	
Current drain	TX High	1.8 A		1.8 A	
	RX Stand-by	90 mA typical (GPS, Bluetooth®, Light:OFF)		65 mA typical	
	RX Max. audio	500 mA		650 mA	
Dimensions*2 (W×H×D)		58.9 × 148.4 × 31.8 mm; 2.3 × 5.8 × 1.3 in		52.2 × 111.8 × 34.1 mm; 2.1 × 4.4 × 1.3 in	
Weight (approx.)		384 g; 13.6 oz (with BP-288 and ANT)		310 g; 10.9 oz (with BP280 and ANT)	
Operating temperature range		−10°C to +60°C; 14°F to +140°F	−20°C to +55°C; -4°F to +131°F	−10°C to +60°C; 14°F to +140°F	−20°C to +55°C; -4°F to +131°F
Frequency stability		±0.4 kHz	±1 ppm	±0.4 kHz	±1 ppm
Output power (PEP/carrier power)		6 W typical/1.8 W		6 W typical/1.8 W	
Microphone impedance		150 Ω		150 Ω	
Sensitivity (COM)		Less than 0 dBμ (at 6 dB S/N)	Less than 0 dBμ (at 12 dB SINAD with CCITT)	Less than 0 dBμ (at 6 dB S/N)	Less than 0 dBμ (at 12 dB SINAD with CCITT)
Adjacent channel rejection			More than 60 dB		More than 60 dB
Spurious response (COM)		More than 60 dBμ	More than 70 dBμ	More than 60 dBμ	More than 70 dBμ
Audio output power (at 10% distortion)		1200 mW typical (Internal SP) 530 mW typical into an 8 Ω load (External SP)		1500 mW typical (Internal SP) More than 350 mW into an 8 Ω load (External SP)	

Panel Mount And Mobile Transceivers

		IC-A220 TSO version	IC-A220*3	IC-A120*3	IC-A120E
TSO certification		●			
NAV/COM channels		COM	COM	COM	COM
Intercom		●	●		
Automatic SQL		●	●		
Active Noise Canceling				●	●
Bluetooth®				● (Use with UT-133A)	● (Use with UT-133A)
IP rating				IP54	IP54
MIL-STD 810		● (G)	● (G)	● (G)	● (G)
Frequency range (unit: MHz)	TX	118.000 ~ 136.992		118.000 ~ 136.992	
	RX	118.000 ~ 136.992 161.650 ~ 163.275 (Weather)		118.000 ~ 136.992	
Number of memory channels		20 channels (Regular)		200 channels (Regular)	
Channel spacing*1		25 kHz/8.33 kHz		25 kHz/8.33 kHz	
Power supply requirements		13.8 V or 27.5 V DC (automatic selection)		13.75 V or 27.5 V DC (automatic selection)	
Current drain	TX High	5.0 A maximum		5.0 A maximum	
	RX Stand-by	500 mA typical		500 mA maximum	
	RX Max. audio	4.0 A		4.0 A maximum	
Dimensions*2 (W×H×D)		160 × 34 × 271 mm; 6.3 × 1.3 × 10.7 in		161 × 45 × 175 mm; 6.3 × 1.8 × 6.9 in	
Weight (approx.)		1.2 kg; 2.6 lb	1.0 kg; 2.2 lb	1.5 kg; 3.3 lb (main unit)	
Operating temperature range		−20°C to +55°C; -4°F to +131°F		−30°C to +60°C; -22°F to +140°F	−20°C to +55°C; -4°F to +131°F
Frequency stability		±5 ppm		±5 ppm (−30°C to +60°C; -22°F to +140°F)	±1 ppm (0°C to +40°C; 32°F to +104°F)
Carrier power		8.0 W		9 W typical	9 W (+1.5 dB/−3 dB)
Microphone impedance		600 Ω		600 Ω	
Sensitivity (COM)		6 dBμ (at 6 dB S/N)		Less than 0 dBμ (at 6 dB S/N)	Less than +5 dBμ (at 12 dB SINAD with CCITT)
Selectivity	8.33 kHz	±2.778/±7.37 kHz (6 dB/60 dB)			
	25 kHz	±3/±22 kHz (6 dB/60 dB)			
Adjacent channel rejection					More than 60 dB
Spurious response (COM)		74 dBμ		74 dBμ	70 dBμ
Audio output power (at 10% distortion)		5 W into a 4 Ω load (External SP) 60 mW into a 500 Ω load (Headphone)		1.5 W typical (Internal SP) More than 10 W into an 8 Ω load (External SP) More than 100 mW into a 500 Ω load (Headphone)	

*1 Use of 8.33 kHz channel spacing may be prohibited in some countries. *2 Projections are not included. *3 Not available for European Market.

All stated specifications are subject to change without notice or obligation.

Handheld Transceivers

MODEL NAME	BATTERY PACKS			BATTERY CASE	CHARGERS		MULTI CHARGER	AC ADAPTER	
	BP-288 Li-ion: 7.2 V/2200 mAh (min.) 2350 mAh (typ.)	BP-279 Li-ion: 7.2 V/1485 mAh (min.) 1570 mAh (typ.)	BP-280 Li-ion: 7.2 V/2280 mAh (min.) 2400 mAh (typ.)	BP-289 LR6 (AA) × 6 cells	BC-224 Rapid charger	BC-213 Rapid charger	BC-214N Rapid multi-charger	BC-123S*2 12 V/1 A BC-242 12 V/1 A (Photo shows BC-242)	BC-157S 12 V/7.5 A
IC-A25N/IC-A25C IC-A25NE/IC-A25CE	●			●	●			● (Use BC-123S with BC-224)	
IC-A16/IC-A16E		●	●			●	●*1	● (Use with BC-213)	● (Use with BC-214N)

MODEL NAME	DC POWER CABLES	CIGARETTE LIGHTER CABLES		SPEAKER MICROPHONES		HEADSET ADAPTERS	Bluetooth® HEADSET	CHARGER BRACKET	ANTENNA
	OPC-515L	CP-20	CP-23L	HM-231 Waterproof	HM-240 Waterproof	OPC-2379 OPC-2401 The side tone function is available. (Photo shows OPC-2379)	VS-3*3	MB-130	FA-B02AR
IC-A25N/IC-A25C IC-A25NE/IC-A25CE		●		●		● (OPC-2379)	●		●
IC-A16/IC-A16E	● (Use with BC-213)		● (Use with BC-213)		●	● (OPC-2401)	●*4	● (Use with BC-213)	●

MODEL NAME	BELT CLIP	LEATHER BELT HANGERS			APPLICATION	PROGRAMMING CABLES	PROGRAMMING SOFTWARE
	MB-133	MB-96F Fixed type	MB-96FL Long type	MB-96N Swivel type	RS-AER01I iOS™ app	OPC-478UD USB type (Photo shows OPC-478UD)	CS-A25 CS-A16 For Windows™ PC
IC-A25N/IC-A25C IC-A25NE/IC-A25CE	●	● (Use with MB-133)	● (Use with MB-133)	●	●	● (OPC-478UD)	● (CS-A25)
IC-A16/IC-A16E	●	● (Use with MB-133)	● (Use with MB-133)	●		● (OPC-478UD)	● (CS-A16)

Panel Mount and Mobile Transceivers

MODEL NAME	HAND MICROPHONES			Bluetooth® HEADSET	Bluetooth® UNIT	HEADSET ADAPTER	REAR PANEL ADAPTER	EXTERNAL SPEAKER
	HM-176 Same as supplied with PS-80 and MB-53.	HM-216	HM-217	VS-3*3	UT-133A	OPC-871A The side tone function is available.	MBA-3 Card edge connector for use with PS-80.	SP-35
IC-A220 TSO version								
IC-A220	● (Use with PS-80/MB-53)						●	● (Use with MB-53)
IC-A120/IC-A120E		●	●	● (Use with UT-133A)	●	●		

MODEL NAME	MOUNTING BRACKET	DC POWER SUPPLY	RoIP GATEWAY	CONNECTION CABLE	PROGRAMMING CABLES		PROGRAMMING SOFTWARE
	MB-53	PS-80*5 Input: 120 ~ 240 V AC Output: 12 V DC, 6 A Max.	VE-PG4	OPC-2275 For connection with VE-PG4. 5m; 16.4ft	OPC-1529R	OPC-478UD USB type OPC-592 Adapter cable (Photo shows OPC-478UD)	CS-A220 CS-A120 For Windows™ PC
IC-A220 TSO version							
IC-A220	●	●			● (OPC-1529R)		● (CS-A220)
IC-A120/IC-A120E			●	●		● (OPC-478UD+OPC-592)	● (CS-A120)

*1 AD-130 charger adapter is supplied with the BC-214N, depending on the charger version. *2 BC-123SA for USA plug. SE for Europe plug. SV for Australia plug. SUK for UK plug.
*3 Not available for European Market (Not compliant with EN62368-1). *4 For the versions with built-in Bluetooth®. *5 Not available for European Market.

Some options may not be available in some countries, or unavailable due to no T/A. Please ask your dealer for details.

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Icom Inc. 1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302

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www.icom-australia.com

Icom Brazil
E-mail: sales@icombrazil.com

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