SPECIFICATIONS

HANDHELD TRANSCEIVERS

	IC-A25N IC-A25C	IC-A25NE IC-A25CE	IC-A16	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	118.000–136.992
Frequency range (unit: MHz) — RX	IC-A25N 108.000–136.992 161.650–163.275 (Weather) 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/8.33kHz	
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	
Current drain — RX Stand-by	90 mA typical (GPS, Bluetooth, Light:OFF)		65 mA typical	
Current drain — 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)		257 g; 9.1 oz (with BP-280)	
Operating temperature range	–10°C to +60°C; 14°F to +140°F	–20°C to +55°C	–10°C to +60°C; 14°F to +140°F	–20°C to +55°C
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 dB	More than 70 dB	More than 60 dB	More than 70 dB
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 TRANSCEIVERS and MOBILE TRANSCEIVERS

	IC-A220 TSO version	IC-A220	IC-A210E	IC-A120	IC-A120E
TSO certification	✔	–	–	–	–
NAV/COM channels	COM	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)	✔ (F)	✔ (G)	✔ (G)
Frequency range (unit: MHz) — TX	118.000–136.992			118.000–136.992	
Frequency range (unit: MHz) — RX	108.000–136.992 161.650–163.275 (Weather)		118.000–136.992	118.000–136.992	
Number of memory channels	20 channels (Regular)		10 channels (Regular)	200 channels	
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	
Current drain — RX Stand-by	500 mA			500 mA maximum	
Current drain — 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			–30°C to +60°C	–20°C to +55°C
Frequency stability	±5 ppm		±1 ppm (0°C to +40°C)	±5 ppm (-30°C to +60°C)	±1 ppm (0°C to +40°C)
Carrier power	8.0 W		6.0 W (4.5–8 W)	9 W typical	9 W (+1.5 dB/–3 dB)
Microphone impedance	600Ω			600 Ω	
Sensitivity (COM)	–101 dBµ (at 6 dB S/N)		–101 dBµ (at 12 dB SINAD)	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)		±2.8 kHz (6 dB)	–	–
Selectivity — 25 kHz	±3/±22 kHz (6 dB/60 dB)		±8.5 kHz (6 dB)	–	–
Adjacent channel rejection	–		–	–	More than 60 dB
Spurious response (COM)	74 dBµ		70 dB	74 dBµ	70 dB
Audio output power (at 10% distortion)	5 W into a 4 Ω load (External SP) 60 mW into a 500 Ω load (Headphone)			1.5W typical (Internal SP) More than 10 W into an 8 Ω load (External SP) More than 100 mW into a 500 Ω load (Headphone)	

All stated specifications are subject to change without notice or obligation. *1 Use of 8.33 kHz channel spacing may be prohibited in some countries. *2 Projections are not included.

ICOM

Aviation Radios

VHF AIR BAND TRANSCEIVERS

IC–A25N
NAV & COM channels for USA/EXP

IC–A25C
COM channels for USA/EXP

IC–A25NE
NAV & COM channels for EUR/AUS

IC–A25CE
COM channels for EUR/AUS

General Features

▌ 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

Navigation Functions (IC-A25N/NE)

▌ Built-in GPS with simplified waypoint NAV (Direct-To NAV and Flight Plan NAV)

▌ Flight plans with iOS™ app RS-AERO1Ⅰ

▌ VOR navigation functions

▌ Near station search function

RS-AERO1Ⅰ map screen example

IC-A25N

IC-A25C

Waypoint NAV screen VOR screen Night mode screen Detailed battery information screen
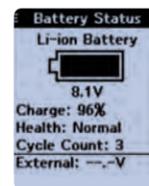
And more

• IP57 dust-protection and waterproof construction • 2350 mAh typ. battery pack, BP-288 supplied • BP-289 battery case supplied (depending on version) • BNC antenna • 121.5 MHz emergency key • NOAA weather channels (IC-A25N/C) • Priority watch • VFO scan, memory channel scan and priority scan • ANL (Auto Noise Limiter) for pulse-type noise reduction • Side tone function enables you to hear your own voice through a third party aviation headset • Built-in VOX capability • 300 memory channels (in 15 memory groups) with 12 character names • 8.33 kHz/25 kHz channel spacing (depending on version) • External DC power jack • Optional waterproof speaker microphone, HM-231

Supplied accessories: (* Not supplied or may differ, depending on the radio version.)
• BP-288 battery pack
• BP-289 battery case*
• BC-224 rapid charger*
• BC-123SA/SE/SV AC adapter for BC-224*
• OPC-2379 headset adapter*
• FA-B02AR antenna
• MB-133 belt clip
• Hand strap

VHF AIR BAND TRANSCEIVERS

IC–A16
For USA

IC–A16E
For EUR

General Features

▌ 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*
* Bluetooth® operation depends on the transceiver version.

▌ Large capacity battery pack provides 17 hours* of long battery life
* With BP-280. Typical operation with TX : RX : Standby = 5:5:90. (Bluetooth® OFF, backlight OFF)

▌ Compact, waterproof and durable body (IP67/IP54 and MIL-STD-810-G)

▌ LCD and key backlight for night time operation

▌ Compatible* with third-party aviation headsets
* Optional headset adapter OPC-2401 required.

And more

• Auto Noise Limiter (ANL) for noise reduction
• Side Tone function
• Internal VOX capability
• 200 memory channels with names up to 8 characters
• BNC type antenna connector
• VFO scan for all frequencies over the COM band and memory channel scan for tagged channels
• NOAA Weather channels (USA version only)
• Optional waterproof speaker microphone, HM-240
• Low battery indication
• 121.5 MHz emergency key
• Duplex function to call a flight service station while receiving on a VOR frequency (USA version only)

IC-A16

IC-A16E

LCD and keypad backlight IP67 waterproofing 1500 mW powerful audio

Supplied accessories: (* Not supplied or may differ, depending on the radio version.)
• BP-280 battery pack
• BC-213 rapid charger*
• BC-242 AC adapter for BC-213*
• FA-B02AR antenna
• MB-133 belt clip
• Hand strap

High-Quality Panel Mount Radio with TSO Certification

IC-A220 TSO version

VHF AIR BAND TRANSCEIVER

IC-A220 [TSO version]

TSO APPROVED

- **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**

And more
• 8.33 kHz/25 kHz channel spacing with the mixed selection function • Remote control capability via the rear panel connector • 9 V power supply operation • 20 memory channels and 20 history memory channels • Dualwatch and priority watch functions • One touch access to 121.5 MHz emergency frequency • Side tone function • ANL (Automatic Noise Limiter) function reduces pulse type noise • Time-out-timer • D-SUB 25-pin connector and MIL-Spec M39029/63-368 compliant socket pins • Two types of menu mode; settings menu and configuration menu • Both 13.8 V and 27.5 V electrical systems compatible • NOAA weather channel receive • 8 W carrier power

* For more details, see the Environmental Qualification Form at www.icomamerica.com. The IC-A220 TSO version is manufactured and serviced by Icom America Inc. All repairs or adjustment information will be provided from Icom America. (http://www.icomamerica.com)

Supplied accessory: Mounting bracket kit

Stay Connected with Various Airport Systems

IC-A210E

VHF AIR BAND TRANSCEIVER

IC-A210E

For EUR

- **High visibility OLED (Organic Light Emitting Diode) screen**
- **GPS memory function* for transmitting frequency data of nearby airports** * External GPS receiver required.
- **Easy channel selection with large "Flip-Flop" arrow button**
- **Auto dimmer function**
- **Intercom function**
- **Easy installation with two types of rear-panel adapters**

And more
• 8.33 kHz/25 kHz channel spacing with the mixed selection function • Remote control capability via the rear panel connector • 10 regular memory channels with a 6-character channel name • 200 group memory channels (20 Ch×10 banks) with a channel tag • One touch access to 121.5 MHz emergency frequency • Side tone function for monitoring your voice with headset • ANL (Automatic Noise Limiter) function reduces pulse type noise • Time-out-timer • PC programming capability • Squelch test function • Dualwatch and priority watch functions • Both 13.8 V and 27.5 V electrical systems compatible • 6 W typ. carrier power • Dial lock and panel lock

Supplied accessories: (* Not supplied, depending on the radio version.)
• Mounting bracket kit
• MB-113 rear panel adapter*

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

IC-A220

VHF AIR BAND TRANSCEIVER

IC-A220

For USA

- **High visibility OLED (Organic Light Emitting Diode) screen**
- **GPS memory function* for transmitting frequency data of nearby airports** * External GPS receiver required.
- **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**

And more
• 8.33 kHz/25 kHz channel spacing with the mixed selection function • Remote control capability through a rear panel connector • 20 memory channels and 20 history memory channels • Dualwatch and priority watch functions • One touch access to 121.5 MHz emergency frequency • Side tone function for monitoring your voice with a headset • ANL (Automatic Noise Limiter) function reduces pulse type noise • PC programming capability • Dial lock and panel lock • Time-out-timer • D-SUB 25-pin connector and MIL-spec M39029/63-368 compliant socket pins • Two types of menu mode; settings menu and configuration menu • Both 13.8 V and 27.5 V electrical systems compatible • NOAA weather channel receive • 8 W carrier power

Supplied accessory: Mounting bracket kit

Enhanced Ground Crew Communications

IC-A120

VHF AIR BAND TRANSCEIVERS

IC-A120

For USA/EXP

IC-A120E

For EUR

- **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**

And more
• Dualwatch and priority scan functions • Side tone function enables you to hear your own voice via a third party aviation headset • A total of 200 memory channels with 12-character channel names • Both 13.8 V and 27.5 V electrical system compatible • 8.33 kHz and 25 kHz channel spacing (depending on version) • 36 W (PEP) RF output power • Power on password protection • PC programming capability • CI-V Commands for external control • VE-PG4 RoIP gateway for interconnect with other radio devices • Compliant with European E-marking for installation in vehicles (IC-A120E)

Supplied accessories:
• HM-216 hand microphone	• DC power cable	• Mounting bracket kit
• Microphone hanger kit	• Fuses	

OPTIONS FOR HANDHELD TRANSCEIVERS

	BATTERY PACKS				BATTERY CASE	CHARGERS		MULTI-CHARGER	AC ADAPTER
MODEL NAME	BP-288 Li-ion: 7.2 V/2200 mAh (min.) 2350 mAh (typ.)	BP-278 Li-ion: 7.2 V/1130 mAh (min.) 1190 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)
IC-A25N/A25NE IC-A25C/A25CE	✔				✔	✔		✔	(Use BC-123S with BC-224)
IC-A16/A16E		✔	✔	✔			✔	✔*1	(Use with BC-213)

*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. UK for UK plug.

	AC ADAPTER	DC POWER CABLES		CIGARETTE LIGHTER CABLES		SPEAKER MICROPHONES		HEADSET ADAPTERS	Bluetooth® HEADSET
MODEL NAME	BC-157S 12 V/7.5 A	OPC-515L	OPC-656	CP-20	CP-23L	HM-231 Waterproof	HM-240 Waterproof	OPC-2379 OPC-2401 (Photo shows OPC-2379)	VS-3 The side tone function is available.
IC-A25N/A25NE IC-A25C/A25CE				✔		✔		✔ (OPC-2379)	✔
IC-A16/A16E	✔ (Use with BC-214N)	✔ (Use with BC-213)	✔ (Use with BC-214N)		✔ (Use with BC-213)		✔	✔ (OPC-2401)	✔*3

*3 For the versions with built-in Bluetooth®.

	BELT CLIP	LEATHER BELT HANGERS			CHARGER BRACKET	ANTENNA	APPLICATION	PROGRAMMING CABLES	PROGRAMMING SOFTWARE
MODEL NAME	MB-133	MB-96F Fixed type	MB-96FL Long type	MB-96N Swivel type	MB-130	FA-B02AR	RS-AERO1Ⅰ iOS™ app	OPC-478UD USB type OPC-2144 Plug adapter cable (Photo shows OPC-478UD)	CS-A25 CS-A16 For Windows® PC
IC-A25N/A25NE IC-A25C/A25CE	✔	(Use with MB-133)	(Use with MB-133)		✔	✔	✔ (IC-A25N/A25NE)	✔ (OPC-478UD+OPC-2144)	✔ (CS-A25)
IC-A16/A16E	✔	(Use with MB-133)	(Use with MB-133)		✔ (Use with BC-213)	✔		✔ (OPC-478UC-1)	✔ (CS-A16)

RS-AERO1Ⅰ Flight Planning Software
(Free Download iOS™ Application from App Store)

Using the RS-AERO1Ⅰ (iOS™) application, you can make flight plans on an iOS device and import the plan into the IC-A25N/A25NE via Bluetooth®.
The following four functions are available:

1. **Create a flight plan**
   You can make flight plans on an iOS device by using preprogrammed waypoints.

2. **Set Direct-To NAV**
   You can select a point on the map and export it to the IC-A25N/NE for Direct-To NAV.

3. **Display flight plan information**
   A flight plan in the IC-A25N/NE can be displayed on an iOS device.

4. **Display waypoint information**
   Preprogrammed waypoints can be exported to an iOS device and plotted on an map application.

App Store
RS-AERO1Ⅰ
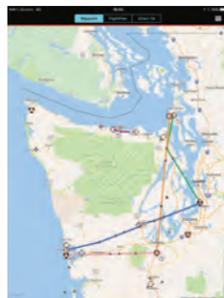
RS-AERO1Ⅰ map screen example
©2017 Google-Map data /©2017 Google

OPTIONS FOR PANEL MOUNT AND MOBILE TRANSCEIVERS

	HAND MICROPHONES			Bluetooth® HEADSET	Bluetooth® UNIT	HEADSET ADAPTER	REAR PANEL ADAPTERS	
MODEL NAME	HM-176 Same as supplied with PS-80 and MB-53.	HM-216	HM-217 Speaker-microphone	VS-3	UT-133A	OPC-871A	MBA-3 Card edge connector for use with PS-80.	MB-113 For D-sub 15-pin connection system
IC-A220 TSO version								
IC-A220	✔ (Use with PS-80/MB-53)						✔	
IC-A210E	✔ (Use with MB-53)							✔
IC-A120/A120E		✔	✔	✔ (Use with UT-133A)	✔	✔		

	EXTERNAL SPEAKER	MOUNTING BRACKET	DC POWER SUPPLY	RoIP GATEWAY	CONNECTION CABLE
MODEL NAME	SP-35	MB-53	PS-80	VE-PG4	OPC-2275 For connection with VE-PG4. 5m; 16.4ft
IC-A220 TSO version					
IC-A220	✔	✔	✔		
IC-A210E		✔			
IC-A120/A120E				✔	✔

	PROGRAMMING CABLES		PROGRAMMING SOFTWARE
MODEL NAME	OPC-1529R RS-232 cable	OPC-478UD USB type OPC-592 Adapter cable (Photo shows OPC-478UD)	CS-A220 CS-A210 CS-A120 For Windows® PC
IC-A220 TSO version			
IC-A220	✔ (OPC-1529R)		✔ (CS-A220)
IC-A210E	✔ (OPC-1529R)		✔ (CS-A210)
IC-A120/A120E		✔ (OPC-478UD+OPC-592)	✔ (CS-A120)

✔ :Applicable   :Not applicable

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