SPECIFICATIONS

HANDHELD TRANSCEIVERS

HANDIILLE	IIIANOOLIVE	-110				
		IC-A25N IC-A25C	IC-A25NE IC-A25CE	IC-A16	IC-A16E	
NAV/COM channe	els	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	>	✓	ı	-	
MIL-STD 810		✓ (G)	∠ (G)	∨ (G)	✓ (G)	
Android TM /iOS TM	app for flight planning	✓(IC-A25N)	✓(IC-A25NE)	ı	1	
	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 memo	ry channels	300 channels	s (15 groups)	200 channels (10 groups)		
Channel spacing*	1	25 kHz/8	3.33 kHz	25 kHz/8.33kHz		
Power supply req	uirements	7.2 V DC 11.0 V DC (Ext		7.2 V DC (BP-280)		
	TX High		3 A	1.8	3 A	
Current drain	RX Stand-by	90 mA typical (GPS,	Bluetooth, Light:OFF)	65 mA typical		
	RX Max. audio	500		650 mA		
Dimensions*2 (W:	κĤ×D)		nm; 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		257 g; 9.1 oz (with BP-280)		
Operating temper		-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 typic		6 W typic		
Microphone impedance		150 Ω			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 respons		More than 60 dB	More than 70 dB	More than 60 dB	More than 70 dB	
Audio output pow		1200 mW typic	al (Internal SP)	1500 mW typical (Internal SP)		
(at 10% distortion)	530 mW typical into an	8 Ω load (External 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	V	_	-	-	-	
NAV/COM channels	COM	COM	COM	COM	COM	
Intercom	V	✓	✓	_	_	
Automatic SQL	V	V	-	-	_	
Active Noise Canceling	_	_	_	✓	V	
Bluetooth®	_	_	_	✓ (Use with UT-133A)	✓ (Use with UT-133A)	
IP rating	_	_	_	IP54	IP54	
MIL-STD 810	∨ (G)	✓ (G)	✓ (F)	√ (G)	✓ (G)	
Frequency TX		118.000-136.992		118.000-	-136.992	
range (unit: MHz)	108.000- 161.650-	-136.992 -163.275 (Weather)	118.000-136.992	118.000-	-136.992	
Number of memory channels	20 channel	20 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 selec	13.75 V or 27.5 V DC (automatic selection)			
TX High		5.0 A maximum		5.0 A maximum		
Current drain RX Stand-by		500 mA	500 mA maximum			
RX Max. audio		4.0 A	4.0 A maximum			
Dimensions*2 (W×H×D)		$0 \times 34 \times 271$ mm; $6.3 \times 1.3 \times 10.7$		n; 6.3 × 1.8 × 6.9 in		
Weight (approx.)	1.2 kg; 2.6 lb		; 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 p		±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		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 (a		-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) 25 kHz ±3/±22 kHz (6 dB/60 dB)			±2.8 kHz (6 dB) ±8.5 kHz (6 dB)	- -		
Adjacent channel rejection	-	-	-	-	More than 60 dB	
Spurious response (COM)	74 (dΒμ	70 dB	74 dBµ 70 dB		
Audio output power 5 W into a 4 Ω load (External at 10% distortion) 60 mW into a 500 Ω load (Headp			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 (Headphon			

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.

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Aviation Radios

2019









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

Class Leading 1500 mW Powerful Audio with a Compact Body

VHF AIR BAND TRANSCEIVERS

IC-A25N

IC-A25C

NAV & COM channels for USA/EXP

IC-A25NE NAV & COM channels for EUR/AUS

IC-A25CE

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 Android™ /iOS™ app RS-AERO1A/RS-AERO1I

VOR navigation functions

Near station search function



RS-AERO1I map screen example

Li-ion Battery



IC-A25C

Сом

118 100

IC-A25N





Detailed battery

Night mode 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
- BC-224 rapid charger
- OPC-2379 headset adapter
- BP-289 battery case*
- BC-123SA/SE/SV AC adapter for BC-224*
- FA-B02AR antenna
- Hand strap

IC-A16 IC-A16E **І**СОМ **ТСОМ** IC-A IS IC-8 168 1 2 3 1 2 2 3 3 -4 5 6 4 5 6 7 8 9 9 1 7 8 9 9 1 ChT COSE SEED ENTER OFFE THE

VHF AIR BAND TRANSCEIVERS

IC-A16

IC-A16E

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*

Large capacity battery pack provides 17 hours* of long

* 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

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)







Supplied accessories: (* Not supplied or may differ, depending on the radio version.)

- BP-280 battery pack
- BC-242 AC adapter for BC-213*
- BC-213 rapid charger* • FA-B02AR antenna
- MB-133 belt clip
- Hand strap

High-Quality Panel Mount Radio with TSO Certification



IC-A220 TSO version

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

TSO version

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

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

VHF AIR BAND TRANSCEIVER

IC-A210E

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

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

Optional PS-80 power supply for desktop use

Intercom function

VHF AIR BAND TRANSCEIVER

IC-A220

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

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

VHF AIR BAND TRANSCEIVERS

IC-A120

IC-A120E

For EUR

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

OPTIONS FOR HANDHELD TRANSCEIVERS

	BATTERY PACKS			BATTERY CASES	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-lon: 7.2 V/1485 mAh (min.) 1570 mAh (typ.)	BP-280 Li-lon: 7.2 V/2280 mAh (min.) 2400 mAh (typ.)	BP-289 LR6 (AA) × 6 cells	BC-224 Rapid charger	BC-213 Rapid charger	BC-214 Rapid multi-charger	BC-123S*2 12 V/1 A
		-	-	:				633	(Photo shows BC-242)
IC-A25N/A25NE IC-A25C/A25CE	V				~	~			(Use BC-123S with BC-224)
IC-A16/A16E		V	V	V			~	✓ *1	(Use with BC-213)

^{*1} AD-130 charger adapter is supplied with the BC-214, 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	RCABLES		E LIGHTER BLES	SPEAKER M	ICROPHONES	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	VS-3 The side tone function is available.
	18	A STATE OF THE PARTY OF THE PAR	S	FOS	EP?	S	S	(Photo shows OPC-2379)	8
IC-A25N/A25NE IC-A25C/A25CE				✓		~		(OPC-2379)	✓
IC-A16/A16E	(Use with BC-214)	(Use with BC-213)	(Use with BC-214)		(Use with BC-213)		~	(OPC-2401)	✓ * ³

*3 For the versions with built-in Bluetooth®

	BELT CLIP	LEATI	HER BELT HANG	GERS	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-AERO1A Android™ app RS-AERO1I iOS™ app	OPC-478UC USB type OPC-2144 Plug adapter cable	CS-A25 CS-A16 For Windows® PC
IC-A25N/A25NE IC-A25C/A25CE	/	(Use with MB-133)	(Use with MB-133)	V		V	(IC-A25N/A25NE)	(OPC-478UC+OPC-2144)	(CS-A25)
IC-A16/A16E	/	(Use with MB-133)	(Use with MB-133)	~	(Use with BC-213)	~		(OPC-478UC)	(CS-A16)

RS-AERO1A/RS-AERO1I Flight Planning Software

(Free Download Android™/iOS™ Application from Google Play™/App Store)

Using the RS-AERO1A (Android[™]) or RS-AERO1I (iOS[™]) application, you can make flight plans on an Android/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 Android/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 Android/iOS device.

4. Display waypoint information

Preprogrammed waypoints can be exported to an Android /iOS device and plotted on an map application.



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 PANE	L 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)							V
IC-A120/A120E		V	'	(Use with UT-133A)	'	V		

	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	V	V	✓		
IC-A210E		V			
IC-A120/A120E				V	V

	PROGRAMM	ING CABLES	PROGRAMMING SOFTWARE
MODEL NAME	OPC-1529R RS-232 cable	OPC-478UC USB type OPC-592 Adapter cable (Photo shows OPC-478UC)	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-478UC+OPC-592)	(CS-A120)

V	: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.