

# IC-A120E

**Top Performance Mobile Airband Radio**  
with Active Noise Cancelling and Bluetooth® Wireless Connectivity



## High Visibility, Simple Operation

The full dot-matrix LCD allows for high visibility and clearly shows alphanumeric characters and icons. Programming memory channels and other radio settings can be simply made from the front panel by radio users. These customizing functions can also be restricted, depending on the radio settings.

## Optional Bluetooth® Headset Connectivity

With the optional UT-133A Bluetooth® unit, the IC-A120E can be used with a third-party wireless Bluetooth® headset. Also, using the optional VS-3 Bluetooth® headset, the side tone function is available.

## Active Noise Cancelling (ANC)

The newly added built-in ANC reduces background noise in the received and transmitting signals. This function is effective in extremely noisy airport environments full of aircraft noise. The automatic noise limiter (ANL)\* reduces pulse-type noise such as engine ignition.

\* The ANL and ANC functions cannot be used at the same time.

## IP54 Dust-Protection and Water Resistance

The IC-A120E has IP54 dust-protection and water resistance. This construction allows for use in open-air vehicles.

## Dualwatch and ON-Hook Scan Functions

The dualwatch function checks the priority and operating channels alternatively. The ON-Hook scan function automatically starts scanning when the hand microphone is hooked on the microphone hanger. When you take the microphone OFF hook, the scanning stops at the priority channel or displayed channel (according to the pre-programming).

## Side Tone Function

When using a third-party headset with the optional OPC-871A headset adapter, the side tone function allows you to monitor your own transmitted voice via the connected headset. Even when using a hand microphone, your voice can be monitored from the headset.

## Optional Speaker-Microphone, HM-217

Listen to received audio through the HM-217's built-in speaker. From the speaker-microphone's front panel, access up/down buttons and two programmable buttons (P1/P2) which can be used as a shortcut to activate frequently used functions.

## Other Features

- A total of 200 memory channels with 12-character channel names
- Both 12- and 24- volt systems compatible
- 8.33 kHz\* and 25 kHz channel spacing  
\* For EUR version only
- 36W (P.E.P) RF output power
- Dualwatch and priority scan functions
- Power on password protection
- PC programming capability
- CI-V Commands for external control
- VE-PG3 RoIP gateway for interconnect with other radio devices
- Compliant with European E-marking for installation in vehicles

## SPECIFICATIONS

GENERAL		IC-A120E
Frequency range	EUR	118.000-136.992MHz
(Tx/Rx)	AUS	118.000-136.975MHz
Channel spacing	EUR	25kHz /8.33kHz
	AUS	25kHz
Type of emission	EUR	6K80A3E, 5K00A3E
	AUS	6K80A3E
Operating temperature		-20°C to +55°C
Antenna connector		SO-239 (50Ω)
Number of memory channels		200 channels
Power supply requirement		13.75V/27.5V DC
Current drain	Tx	5.0A (maximum)
(at 13.75V)	Rx	4.0A (at AF max.), 0.5A (at stand-by)
Dimensions		161 (W) x45 (H) x175 (D) mm
(Projections not included)		approximately
Weight		1.5kg approximately (main unit)
TRANSMITTER		
Output power (at 13.75V)		9.0W+1.5dB/-3dB (-20°C to +55°C)
(Carrier Power)		9.0W±1.5dB (+15°C to +35°C)
Frequency stability		±1ppm (0°C to +40°C)
Spurious emissions*1		
9kHz to 30MHz		Less than -46dBm
30MHz to 1GHz		Less than -36dBm/ Less than -46dBm*2
1GHz to 4GHz		Less than -30dBm/ Less than -40dBm*2
Microphone impedance		600Ω
RECEIVER		
Intermediate frequencies		38.85MHz/450kHz (1st/2nd)
Sensitivity (at 12dB SINAD)		Less than 1.8 μV (with CCITT filter)
Selectivity	8.33kHz	2.778/7.37kHz (6dB/60dB)
	25kHz	8/25kHz (6dB/60dB)
Spurious response		More than 70dB
Audio output power		(10% distortion, 60% modulation)
Internal SP (8Ω load)		1.5W typical
External SP (8Ω load)		More than 10W
Headphone (500Ω load)		More than 100mW

\*1 Except for operating frequency ±1MHz. \*2 For Harmonics/Non-harmonics. Measurements made in accordance with EN 300 676-1. All stated specifications are subject to change without notice or obligation.

### Applicable U.S. Military Specifications

Standard	MIL 810 G	
	Method	Procedure
Low Pressure	500.5	I, II
High Temperature	501.5	I, II
Low Temperature	502.5	I, II
Temperature Shock	503.5	I-C
Solar Radiation	505.5	I
Humidity	507.5	II
Vibration	514.6	I
Shock	516.6	I, IV

Also meets equivalent MIL-STD-810-C, -D, -E and -F.

### Applicable IP Rating

Ingress Protection Standard	
Dust & Water	IP54 (Dust-protection and water resistance)

### Supplied Accessories

- Hand microphone, HM-216
- DC power cable
- Microphone hanger kit
- Mounting bracket kit
- Fuses

## OPTIONS

**Bluetooth® UNIT & Bluetooth® HEADSET**



**UT-133A**      **VS-3**  
Use with UT-133A in a pair.

**HAND MICROPHONES**




**HM-216**      **HM-217**  
Same as supplied.      Speaker-microphone.

**HEADSET ADAPTER**



**OPC-871A**  
To interconnect with a third-party aviation headset.

**RoIP GATEWAY & CABLE**



**VE-PG3**      **OPC-2275**  
To interconnect with other radio devices.

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