



ATEX Intrinsically safe versions



An intrinsically safe version conforming to the 94/9/EC ATEX Directive, is suitable for use in hazardous areas where flammable gasses or liquids are used such as petroleum tankers and bulk cargo carrier.

The approved rating is II2G EEx ib IIA T3.  
Special conditions for use: Must be used with BP-227AX  
Approved accessories: Speaker-microphone HM-138  
Ambient operating temperature: -20°C to +55°C  
Ask your dealer for details.

SPECIFICATIONS

GENERAL

- Frequency range : Marine Tx 156.000-161.450MHz, Rx 156.000-163.425MHz, PMR Tx/Rx 146.000-174.000MHz
- Usable channels\* : INT, U.S.A. channels ( \* Varies according to version.) 22 PMR channels
- Channel spacing : Marine 25kHz, PMR 25/12.5kHz, 20/12.5kHz
- PLL channel step (PMR) : 5/6.25/7.5kHz
- Current drain (at 7.2V DC) : Tx (at 5W output) 1.6A, (at 1W output) 0.7A, Rx (at AF max.) 200mA
- Operating temp. range (except BP-227) : Marine -15°C to +55°C, PMR -25°C to +55°C, PMR ATEX version -20°C to +55°C
- Antenna impedance : 50Ω (SMA)
- Dimensions (W×H×D) : 62×97×39 mm (projections not included)
- Weight (approx.) : 280g (with BP-227), 290g (with BP-227AX)

TRANSMITTER

- Output power (Hi/Mid/Low) : 5/3/1W
- FRG version Marine 1/0.5W, PMR 5/3/1W
- ATEX version Marine 1/0.5W, PMR 1W
- Max. frequency deviation : Marine ± 5.0kHz, PMR (25/20/12.5kHz) ± 5.0/4.0/2.5kHz
- Audio harmonic distortion : Less than 10% (at 60% mod.)
- Spurious emissions : 0.25µW (below 2GHz)
- Adjacent channel power : Marine 70dB, PMR (wide/narrow) 70/60dB
- Residual modulation : Marine 40dB, PMR (wide/narrow) 40/34dB

RECEIVER

- Sensitivity (at 20dB SINAD; emf) : Marine -2dBµ typical, PMR -4dBµ typical
- Squelch sensitivity (emf) : ±0dBµ typical (at threshold)
- Adjacent Ch. selectivity : Marine 70dB, PMR (wide/narrow) 70/60dB

- Spurious response : 70dB
- Intermodulation rejection : Marine 68dB, PMR 65dB
- Hum and noise ratio : Marine 40dB, PMR (wide/narrow) 40/34dB
- Audio output power (at 10% dist. with an 8Ω load) : Marine 0.2W, PMR 0.35W

Applicable U.S. Military Specifications

Standard	MIL 810 C		MIL 810 D		MIL 810 E		MIL 810 F	
	Method	Proc.	Method	Proc.	Method	Proc.	Method	Proc.
Low Pressure	500.1	I	500.2	I, II	500.3	I, II	500.4	I, II
High Temp.	501.1	I	501.2	I, II	501.3	I, II	501.4	I, II
Low Temp.	502.1	I	502.2	I, II	502.3	I, II	502.4-3	I, II
Temp. Shock	503.1	I	503.2	I	503.3	I	503.4	I
Solar Radiation	505.1	I	505.2	I	505.3	I	505.4	I
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, II
Humidity	507.1	I, II	507.2	II, III	507.3	II, III	507.4	-
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	-
Dust	510.1	I	510.2	I	510.3	I	510.4	I
Vibration	514.2	VIII, X	514.3	I	514.4	I	514.5	I
Shock	516.2	I, II, V	516.3	I, IV	516.4	I, IV	516.5	I, IV

Measurements made in accordance with EN301 178 2 or EN300 086. All stated specifications are subject to change without notice or obligation.

Supplied accessories:

- Battery pack • Battery charger • AC adapter\* • Swivel belt clip • Antenna, FA-S59V • Hand strap (\* Varies according to version.)

OPTIONS

BP-226 BATTERY CASE

Battery case for AA (LR6)×5 alkaline cells. Water resistant, equivalent to IPX4.

BP-226 is not approved as intrinsically safe.

BP-227/ AX Li-Ion BATTERY PACK

7.2V/1700mAh Li-Ion battery pack. Provides 15 hours operating time\* (approx. at 5 Watts). BP-227AX is for ATEX version. Operating temp. range: BP-227; -20°C to +60°C, BP-227AX; -20°C to +55°C

\* Tx (Hi): Rx: standby=5:5:90

BC-152 DESKTOP CHARGER

+ BC-147 A/ EAC ADAPTER  
Regularly charges the BP-227 in 9-10 hours. The same as that supplied.

BC-119N DESKTOP CHARGER

+ AD-100 CHARGER ADAPTER  
+ BC-145 A/ E/ V/ UK AC ADAPTER  
For rapid charging of battery pack. An AC adapter is supplied depending on version. Charging time: 2.5-3 hours.

BC-121N MULTI-CHARGER

+ AD-100 CHARGER ADAPTER  
+ BC-157 AC ADAPTER  
For rapid charging of up to 6 battery packs (Six AD-100s are required). Charging time: 2.5-3 hours.

BC-152, BC-119N and BC-121N are not approved as intrinsically safe. Do not charge the BP-227AX in an explosive atmosphere.

CP-17L CIGARETTE LIGHTER

CABLE WITH NOISE FILTER

OPC-515 LC DC POWER CABLE

For use with the battery charger, BC-152 or BC-119N, instead of the AC adapter. (12-16 V DC required)

OPC-656 DC POWER CABLE

For use the BC-121N with a DC power supply. (12-16V DC required)

These cables are not approved as intrinsically safe.

HM-138 SPEAKER-MICROPHONE

Full sized, waterproof construction equivalent to IPX7 (1 m/30 min.). Approved as intrinsically safe.

MB-86 SWIVEL BELT CLIP

Swivel belt clip. Prevents accidental dropping from your belt. The same as that supplied.

MB-98 BELT CLIP

Alligator type belt clip.

MB-96N LEATHER BELT HANGER

Swivel type belt hanger.

MB-96F LEATHER BELT HANGER

Fixed type belt hanger for use with MB-98.



Icom Inc. 1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 URL: <http://www.icom.co.jp/world/index.html> Count on us!

Icom America Inc.

2380 116th Avenue NE, Bellevue, WA 98004, U.S.A. Phone: +1 (425) 454-8155 Fax: +1 (425) 454-1509 E-mail: [sales@icomamerica.com](mailto:sales@icomamerica.com) URL: <http://www.icomamerica.com>

Icom New Zealand

146A Harris Road, East Tamaki, Auckland, New Zealand Phone: +64 (09) 274 4062 Fax: +64 (09) 274 4708 E-mail: [inquiries@icom.co.nz](mailto:inquiries@icom.co.nz) URL: <http://www.icom.co.nz>

Icom (UK) Ltd.

Unit 9, Sea St., Herne Bay, Kent, CT6 8LD, U.K. Phone: +44 (0)1227 741741 Fax: +44 (0)1227 741742 E-mail: [info@icomuk.co.uk](mailto:info@icomuk.co.uk) URL: <http://www.icomuk.co.uk>

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](mailto:sales@asia-icom.com) URL: <http://www.asia-icom.com>

Icom Canada

Glenwood Centre #150-6165 Highway 17, Delta, B.C., V4K 5B8, Canada Phone: +1 (604) 952-4266 Fax: +1 (604) 952-0090 E-mail: [info@icomcanada.com](mailto:info@icomcanada.com) URL: <http://www.icomcanada.com>

Icom (Europe) GmbH

Communication Equipment Himmelgeister Str. 100, D-40225 Düsseldorf, Germany Phone: +49 (0)211 346047 Fax: +49 (0)211 333639 E-mail: [info@icom-europe.com](mailto:info@icom-europe.com) URL: <http://www.icomeurope.com>

Icom France S.a

Zac de la Plaine, 1, Rue Brindejonc des Moutains BP 5804, 31505 Toulouse Cedex, France Phone: +33 (5) 61 36 03 00 Fax: +33 (5) 61 36 03 03 E-mail: [icom@icom-france.com](mailto:icom@icom-france.com) URL: <http://www.icom-france.com>

Beijing Icom Ltd.

10C07, Long Silver Mansion, No.88, Yong Ding Road, Haidian District, Beijing, 100039, China Phone: +86 (010) 5889 5391/5392/5393 Fax: +86 (010) 5889 5395 E-mail: [bjicom@bjicom.com](mailto:bjicom@bjicom.com) URL: <http://www.bjicom.com>

Icom (Australia) Pty. Ltd.

A.B.N. 88 006 092 575 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](mailto:sales@icom.net.au) URL: <http://www.icom.net.au>

Icom Spain S.L.

Ctra. de Gracia a Manresa Km. 14,750 08190 Sant Cugat del Valles Barcelona, Spain Phone: +34 (93) 590 26 70 Fax: +34 (93) 589 04 46 E-mail: [icom@icomspain.com](mailto:icom@icomspain.com) URL: <http://www.icomspain.com>

Icom Polska

Sopot, 3 maja 54, Poland Phone: +48 (58) 550 7135 Fax: +48 (58) 551 0484 E-mail: [icompolkska@icompolkska.com.pl](mailto:icompolkska@icompolkska.com.pl) URL: <http://www.icompolkska.com.pl>



Your local distributor/dealer:

Apex Radio Systems Ltd.  
102 Tantobie Road  
Denton Burn  
Newcastle upon Tyne  
NE15 7DQ

Tel 0191 228 0466  
Fax 0191 228 0467  
Email [info@apexradio.com](mailto:info@apexradio.com)

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