

ATEX certified, 0 dBd, Omnidirectional Base Station Antenna for the International Aircraft Band in Hazardous areas

DESCRIPTION

- CXL 130-1-Ex is a 0 dBd, vertically polarized, omnidirectional base station antenna for the 118 - 137 MHz civil aircraft band.
- The antenna is specified as ATEX antenna for use in zone 2 in potentially explosive areas.
- Before installing the antenna, read the ATEX Product Manual carefully.
- The antenna is suitable for use in gas groups IIA, IIB and IIC in zone 2.
- The antenna is a broad-banded ½ λ dipole design.
- The antenna can be mounted on threaded 1" water pipe using the supplied 1" revolving nut. In this way, a nice, slim installation is obtained.
- A wide variety of accessory mounting hardware (see below) gives ample choice regarding alternative ways of installation.
- All metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- A conical glass fibre tube with very low wind-loading completely encloses the carefully designed radiating element to ensure long dependable service in all climates.



ORDERING

Type	Product No.
CXL 130-1-Ex	115000026
LW-SS-1"-Ex *	115000102

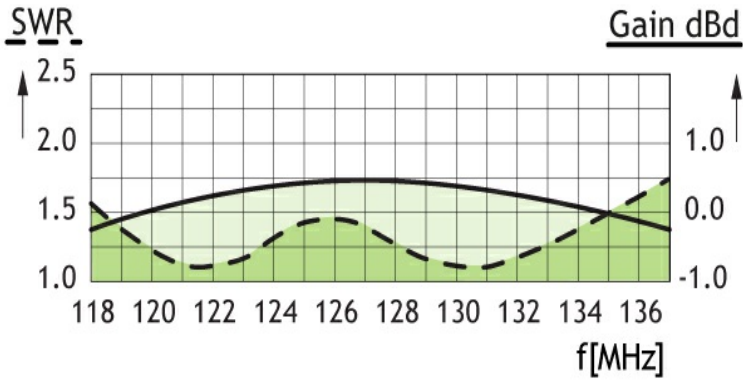
SPECIFICATIONS

Electrical	
Model	CXL 130-1-Ex
Frequency	118 - 137 MHz
Antenna Type	Coaxial dipole, broad-banded
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	80 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	0 dBd (2.2 dBi)
VSWR	< 1.75:1
Bandwidth	19 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	
Mechanical	
Connector Torque	UHF-female (fitting PL-259) 0.7 - 1.1 Nm
Materials	Radome: Polyurethane-coated glass fibre Mounting hardware: Black chromed brass
Installation Torque	20 - 25 Nm
Colour	Blue (RAL +5015)
Wind Area	0.023 sq. m / 0.25 sq. ft
Wind Load	29 N (160km/h)
Height	1430 mm / 56.30 in.
Weight	0.85 kg / 1.87 lb
Mounting	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories)
ATEX Marking	II 3G Ex nA IIC T6
Environmental	
Operating Temperature Range	-30°C to +60°C
Survival Wind Speed	200 km/h
Ingress Protection	IP66

ADDITIONAL DATA

*See the ATEX Product Manual (safety and mounting instructions) and related EU DECLARATION OF CONFORMITY ATEX Directive 2014/34/EU.

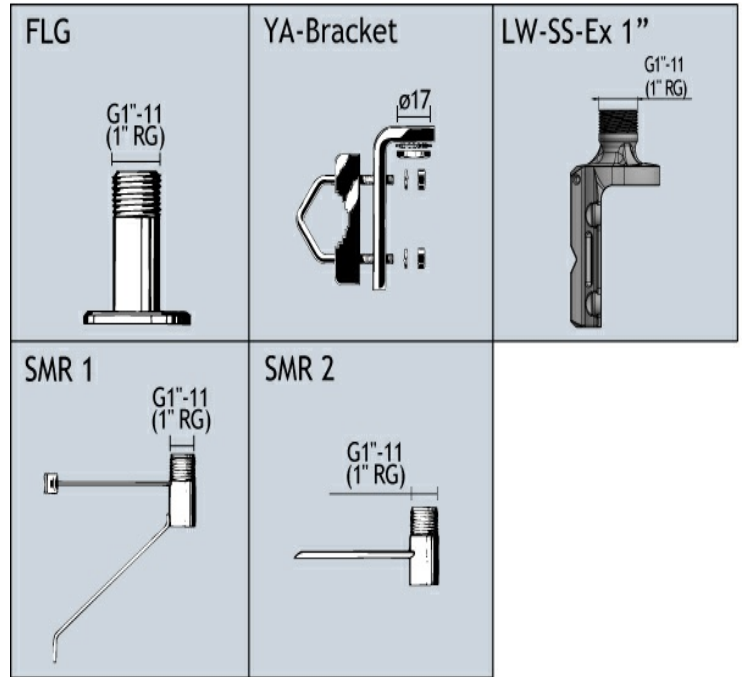
TYPICAL GAIN AND SWR CURVES



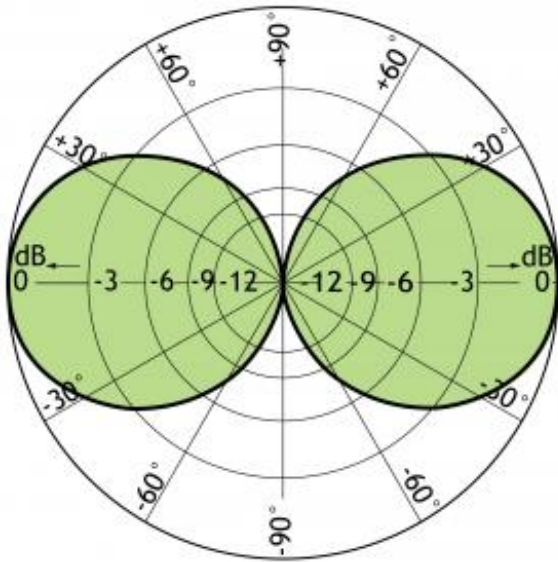
CALCULATION OF MAX. ANTENNA INPUT POWER IN DIFFERENT ATEX GROUPS

ATEX GROUP	MAX. EIRP POWER	ANTENNA GAIN	MAX INPUT POWER
IIA	37.7 dBm (6.0 W)	0 dBd / 2.15 dBi	35.6 dBm (3.6 W)
IIB	35.4 dBm (3.5 W)	0 dBd / 2.15 dBi	33.3 dBm (2.1 W)
IIC	33.0 dBm (2.0 W)	0 dBd / 2.15 dBi	30.8 dBm (1.2 W)

ACCESSORIES (TO BE ORDERED SEPARATELY)



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

ATEX GROUNDING KIT

