ATEX certified, 0 dBd, Omnidirectional Base Station Antenna for the 824 - 960 MHz Band in Hazardous areas



DESCRIPTION

- CXL 900-1LW-SS-Ex is a 0 dBd, vertically polarized, omnidirectional base station Antenna which covers the 824 - 960 MHz band in two models.
- The antenna is specified as an ATEX antenna for use in zone 2 in potentially explosive areas.
- Before installing the antenna, please read the ATEX Product Manual carefully.
- The antenna is suitable for use in gas groups IIA, IIB and IIC in zone 2.
- It's only necessary to install an ATEX grounding Kit on the LW-SS-Ex bracket, when the point of installation has a different electrical potential than the system.
- The accompanying U-bolts and fittings are made of stainless steel.
- All metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.

ORDERING

Model	Product No.	Frequency
CXL 900-1LW-SS-Ex/l	115000032	824 - 894 MHz
CXL 900-1LW-SS-Ex/h	115000033	870 - 960 MHz
ATEX grounding kit	115000100	

SPECIFICATIONS

Electrical	
Model	CXL 900-1LW-SS-Ex
Frequency	Models within 824 - 960 MHz. See ordering designations
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	< 1.5:1
Bandwidth	70 - 90 MHz depending on model
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	

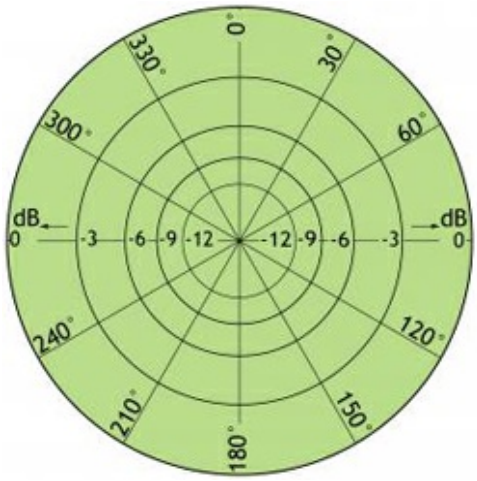
Mechanical	
Connector Torque	N-female 0.7 - 1.1 Nm
Materials	Radome: Polyurethane-coated glass fibre Mounting bracket: Stainless acid-proof steel (AISI 316L) U-bolt and fittings: Stainless steel (AISI 316L)
Installation Torque	On 16 to 54 mm / 0.63 - 2.13 in. dia. mast tube - 3 Nm
Colour	Blue (RAL +5015)
Wind Area	0.009 sq. m / 0.10 sq. ft
Wind Load	9.5 N (160km/h)
Dia. At Top End	22.5 mm / 0.89 in.
Height	530 mm / 20.87 in.
Weight	0.9 kg / 1.98 lb
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

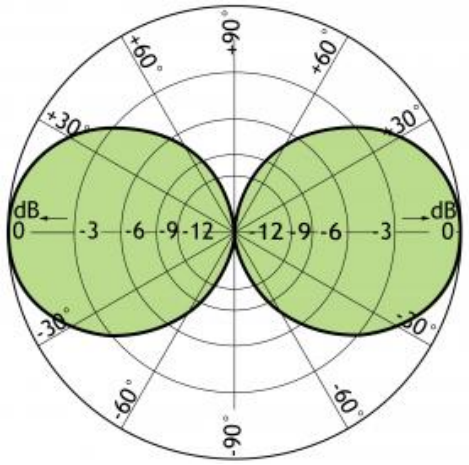
ADDITIONAL DATA

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

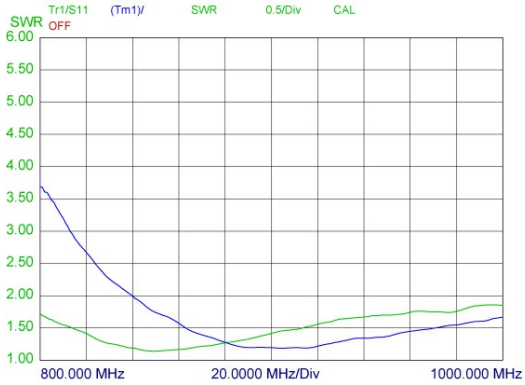
TYPICAL RADIATION PATTERN (H-PLANE)



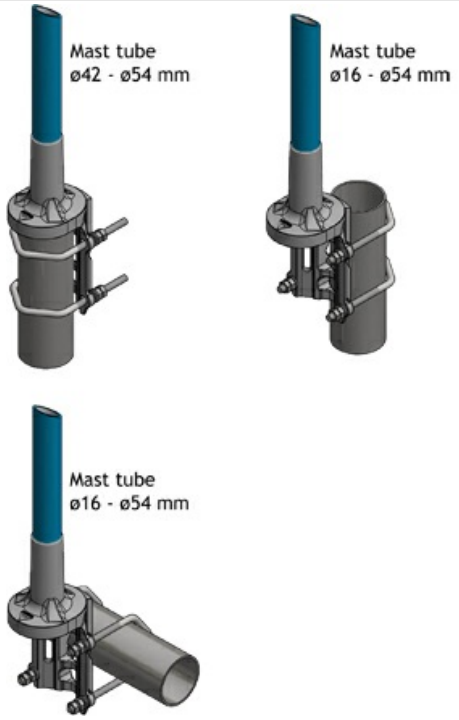
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL GAIN AND SWR CURVES



MULTI-PURPOSE MOUNTING BRACKET



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)