

CXL 130-1LW-SS-Ex

ATEX certified, 0 dBd, Omnidirectional Base Station Antenna for the International 118 - 137 MHz Band in Hazardous areas

- CXL 130-1LW-SS-Ex is a 0 dBd, vertically polarized, omnidirectional base station antenna which covers the 118 - 137 MHz band in Hazardous areas.
- The antenna is specified as an ATEX antenna for use in zone 2 in potentially explosive areas.

DESCRIPTION

- 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 antenna is a broad-banded $\frac{1}{2} \lambda$ dipole design.
- The accompanying U-bolts and fittings are made of stainless steel.
- The antenna element is sealed in high-quality glass fibre tube.
- All metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
CXL 130-1LW-SS-Ex	115000001
ACCESSORIES	
ATEX grounding kit	115000100

SPECIFICATIONS

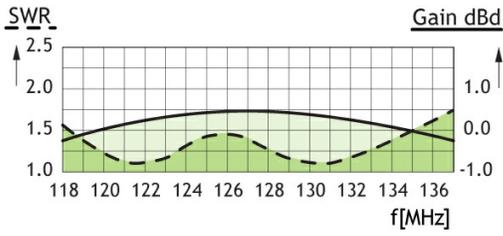
ELECTRICAL	
MODEL	CXL 130-1LW-SS-Ex
ANTENNA TYPE	$\frac{1}{2} \lambda$ coaxial dipol, broad-banded
FREQUENCY	118 - 137 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	19 MHz
SWR	≤ 1.75
MAX. RF INPUT POWER DUE TO MAX. EIRP IN ATEX ENVIRONMENT *	
Group IIA	35.6 dBm (3.6 W)
Group IIB	33.3 dBm (2.1 W)
Group IIC	30.8 dBm (1.2 W)
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
HCM CODE	HCM000ND00, 040DE00



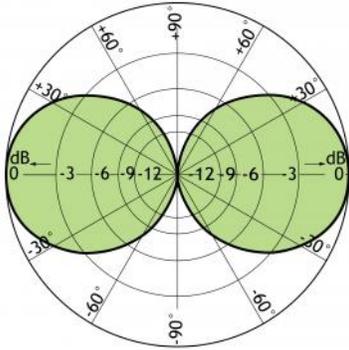
MECHANICAL	
CONNECTOR	N-female
TIGHTENING TORQUE	0.7 - 1.1 Nm
WIND SURFACE	0.023 m ² / 0.25 ft ²
WIND LOAD	29 N @ 160 km/h / 99.42 mph
MAX. WIND SPEED	200 km/h / 124.27 mph
COLOUR	Blue (RAL 5015)
MATERIALS	Radome: Polyurethane-coated glass fibre Mounting bracket: Stainless acid-proof steel (AISI 316L) U-bolt and fittings: Stainless steel (AISI 304L)
TOTAL HEIGHT	Approx. 1.5 m / 59.06 in.
DIA. IN TOP END	17 mm / 0.67 in.
DIA. IN BOTTOM END	23 mm / 0.91 in.
WEIGHT	Approx. 1.25 kg / 2.76 lb.
MOUNTING TIGHTENING TORQUE	On 16 to 54 mm / 0.63 x 2.13 in. dia. mast tube 3 Nm
ATEX MARKING	II 3G Ex nA IIC T6
ENVIRONMENTAL	
TEMP. RANGE	-30° C → +60° C
IP RATING	IP 66

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

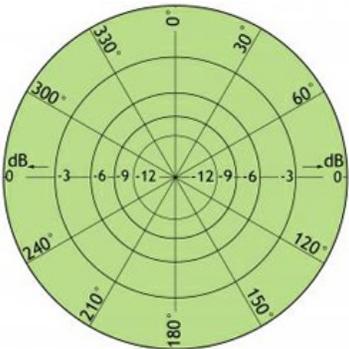
TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



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)

MULTI-PURPOSE MOUNTING BRACKET

