

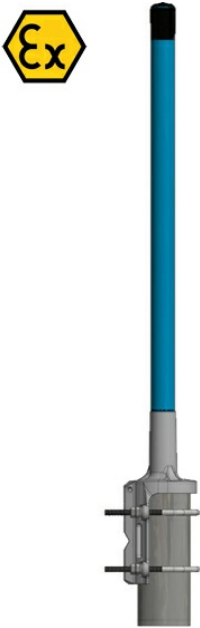
ATEX certified, 3 dBd, Omnidirectional Base Station
Antenna for the 2200 - 2700 MHz Band in Hazardous
areas

DESCRIPTION

- CXL 2400-3LW-SS-Ex is a 3 dBd, vertically polarized, omnidirectional base station Antenna which covers the 2200 - 2700 MHz band in four 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.
- The antenna element is sealed in a 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.

SPECIFICATIONS

Electrical	
Model	CXL 2400-3LW-SS-Ex
Frequency	100 - 200 MHz wide frequency segments within 2200 - 2700 MHz. See ordering designations
Antenna Type	Coaxial, broad-band, collinear antenna
Special spec. info	Max. RF Input Power due to max. EIRP in ATEX Environment *: Group IIA : 32.6 dBm (1.8 W) Group IIB : 30.3 dBm (1.0 W) Group IIC : 27.8 dBm (0.6 W)
Polarisation	Vertical
Impedance	50 Ω
Gain	5 dBi 3 dBd
VSWR	≤ 2.0, typ. ≤ 1.5
Bandwidth	For l, m and h models : ≥ 200 MHz @ VSWR ≤ 2.0 For Il-model: ≥ 100 MHz @ VSWR ≤ 2.0
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 015DE40
Half Power Beamwidth	22°



Mechanical	
Connector Torque	N(f) : 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	3 Nm
Colour	Blue
Max. Wind Speed	200 km/h / 124.27 mph.
Wind Load	Approx. 26 N @ 160 km/h / 99.42 mph.
Wind Surface	Approx. 0.02 m² / 0.22 ft²
Dia. At Top End	22 mm / 0.87 in.
Dia. At Bottom End	23 mm / 0.91 in.
Height	Approx. 700 mm / 27.56 in.
Weight	Approx. 850 g / 1.87 lb.
Mounting	On 16 to 54 mm / 0.63 - 2.13 in. dia. mast tube
ATEX Marking	II 3G Ex nA IIC T6

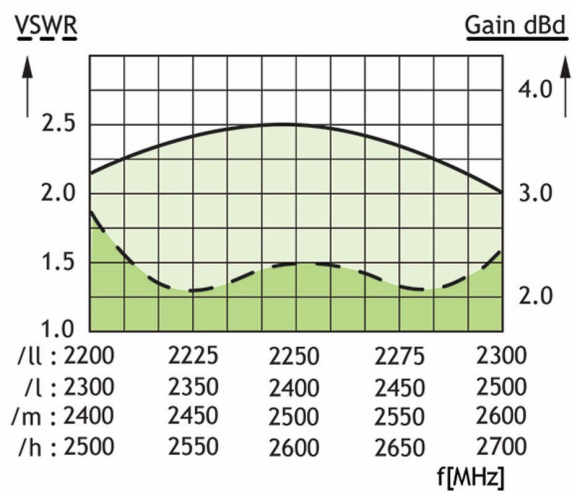
Environmental	
Operating temperature range	-30 °C to +60 °C
Survival Wind Speed	200 km/h
Ingress Protection	IP66

ORDERING

Model	Product No.	Frequency
CXL 2400-3LW-SS-Ex/II	115000020	2200 - 2300 MHz
CXL 2400-3LW-SS-Ex/I	115000021	2300 - 2500 MHz
CXL 2400-3LW-SS-Ex/m	115000022	2400 - 2600 MHz
CXL 2400-3LW-SS-Ex/h	115000023	2500 - 2700 MHz

Accessories	
ATEX Grounding Kit	115000100

TYPICAL GAIN AND VSWR CURVE

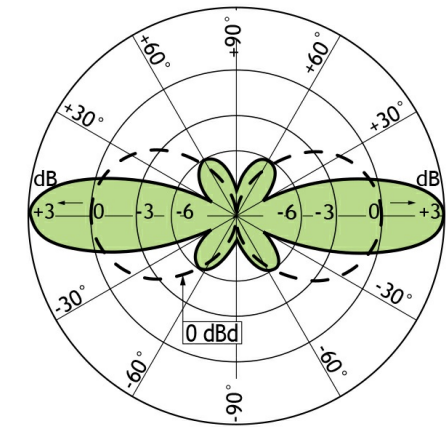


CALCULATION OF MAX. ANTENNA INPUT POWER IN DIFFERENT ATEX GROUPS

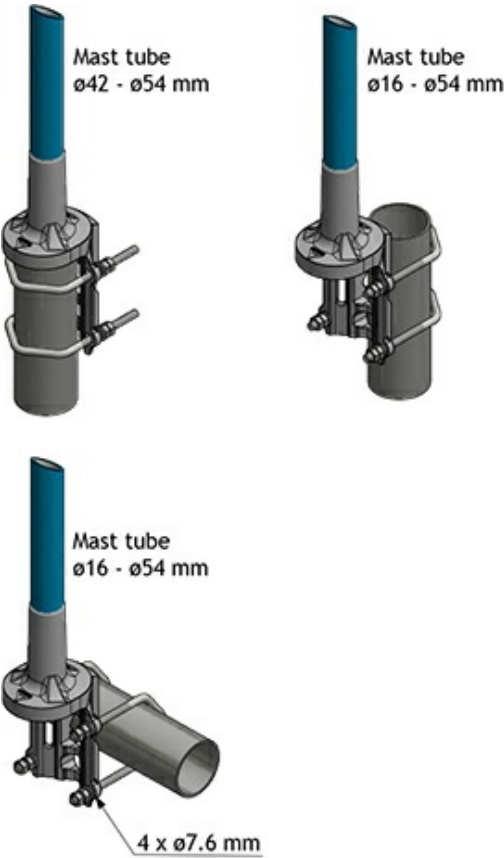
ATEX GROUP	MAX. EIRP POWER	ANTENNA GAIN	MAX INPUT POWER
IIA	37.7 dBm (6.0 W)	3 dBd / 5.15 dBi	32.6 dBm (1.8 W)
IIB	35.4 dBm (3.5 W)	3 dBd / 5.15 dBi	30.3 dBm (1.0 W)
IIC	33.0 dBm (2.0 W)	3 dBd / 5.15 dBi	27.8 dBm (0.6 W)

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

TYPICAL RADITION PATTERN (E-PLANE)



MOUNTING DETAILS



TYPICAL RADITION PATTERN (H-PLANE)

