



# CXL 130-1LW-SS-Ex

ATEX CERTIFIED, 0 DBD, OMNIDIRECTIONAL BASE STATION ANTENNA FOR THE INTERNATIONAL AIRCRAFT BAND IN HAZARDOUS AREAS

## CXL 130-1LW-SS-EX

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



- CXL 130-1LW-SS-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.

### DESCRIPTION

- Before installing the antenna, read the technical documentation carefully.
- The antenna is suitable for use in gas groups IIA, IIB and IIC in zone 2.
- A grounding-kit is supplied with the antenna. Only to be used to ensure equipotential bonding. See the ATEX Product Manual for further details.
- The antenna is a broad-banded  $\frac{1}{2} \lambda$  dipole design.
- 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 DESIGNATIONS

TYPE	PRODUCT NO.
CXL 130-1LW-SS-Ex	115000001



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**ANTISTATIC PROTECTION** All metal parts DC-grounded (Connector shows a DC-short)

## ELECTRICAL

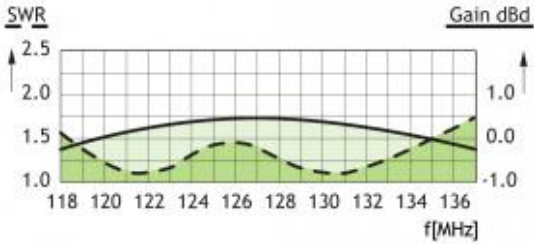
MODEL	CXL 130-1LW-SS-Ex
ANTENNA TYPE	$\frac{1}{2}$ $\lambda$ coaxial dipol, broad-banded
FREQUENCY	118 - 137 MHz
IMPEDANCE	Nom. 50 $\Omega$
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	19 MHz
SWR	$\leq 1.75$
MAX. RF INPUT POWER DUE TO MAX. EIRP IN ATEX ENVIRONMENT *	
Group IIA Group IIB Group IIC	: 35.6 dBm (3.6 W) : 33.3 dBm (2.1 W) : 30.8 dBm (1.2 W)



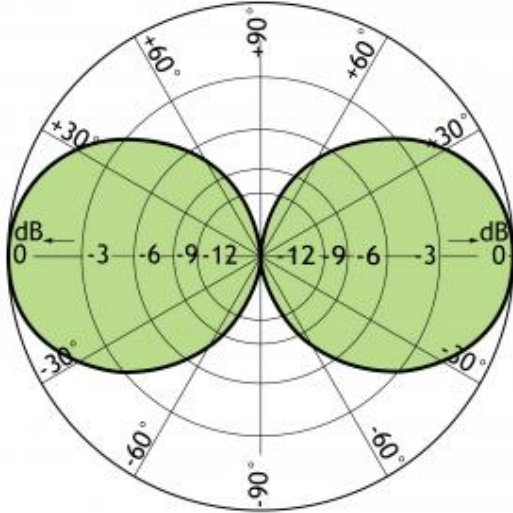
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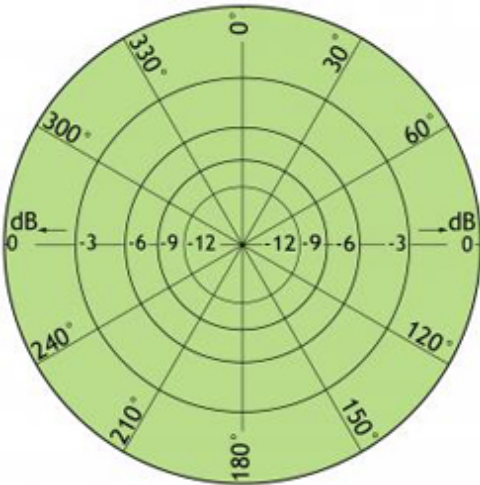
## TYPICAL GAIN AND SWR CURVES



## TYPICAL RADIATION PATTERN (E-PLANE)



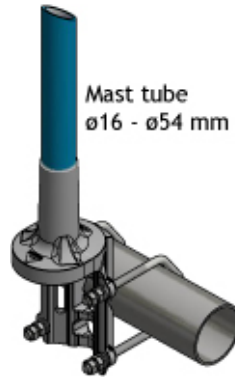
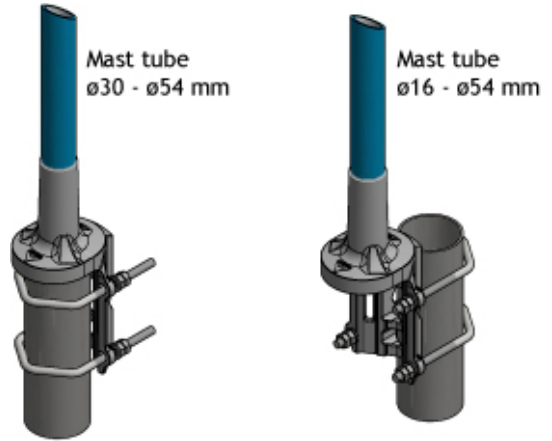
## TYPICAL RADIATION PATTERN (H-PLANE)



## 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





## CXL 130-1LW-SS-Ex

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