

## GPS 4-Ex

ATEX Certified GPS, Galileo, Glonass and BeiDou antenna for Mast Mounting in Hazardous areas

- Passive quadrifilar helix antenna for fixed installation.
- Covering GPS, Galileo, Glonass and BeiDou.
- The antenna is specified as ATEX antenna for use in zone 2 in potentially explosive areas.
- The antenna is to be used as a receiver only.

### DESCRIPTION

- 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.
- Right-hand circularly polarized antenna (RHCP).
- The circularly polarized antenna minimizes the fading effect often encountered in environments with reflecting obstacles.
- Mounting bracket available to make the perfect installation for your specific needs.
- All metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- Maximum recommended cable loss between antenna and receiver is 9 dB (e.g. 20 m RG 58 A/U-XLL) for receivers with acquisition sensitivity of < -142 dBm. Higher cable loss can be tolerated for receivers with lower acquisition sensitivity.

### ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
GPS 4-Ex	115000029
ACCESSORIES	
ATEX grounding kit	115000100
SM-MAS	110000196



### SPECIFICATIONS

ELECTRICAL	
MODEL	GPS 4-Ex
ANTENNA TYPE	Passive quadrifilar helix antenna
FREQUENCY	1575 - 1650 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Circular right-hand
COVERAGE	Hemispherical
GAIN	Approx. 2 dBic
BANDWIDTH	75 MHz
SWR	≤ 2.0
MAX. POWER	Receiver only
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
MECHANICAL	
CONNECTOR	N-female
WIND SURFACE	Approx. 0.0072 m² / 0.08 ft²
MAX. WIND SPEED	200 km/h / 124.3 mph.
WIND LOAD	Approx. 9.6 N @ 150 km/h / 93.2 mph.
COLOUR	Blue
MATERIALS	Shroud: Polyurethane - Coated glass fiber Mounting bracket: Stainless steel
TOTAL HEIGHT	Approx. 25 cm / 9.84 in.
ANTENNA DIA.	40 mm / 1.57 in.
WEIGHT	Approx. 450 g / 0.99 lb.
MOUNTING TIGHTENING TORQUE	SM-MAS Mounting brackets 6.5 - 7 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.](#)

Technical drawing of a 4-way cross connector (4-Wege-Kreuzverbinde) showing side, top, and front views with dimensions.

**Side View (Top):** Shows the profile of the connector with a total width of 82.5 mm and a height of 89.5 mm. The central vertical section has a width of 50.8 mm and a height of 50.8 mm. The side flanges have a thickness of 9.2 mm.

**Top View:** Shows the circular top of the connector with a diameter of  $\varnothing 100$  mm. The central vertical section has a diameter of  $\varnothing 70$  mm. The side flanges have a thickness of 9.2 mm. The distance between the centers of the four ports is 50.8 mm. The distance from the center to the edge of the flange is 42.5 mm. The angle between the ports is 120°.

**Front View (Bottom):** Shows the U-shaped profile of the connector with a total width of 43 mm and a height of 42.5 mm. The central vertical section has a width of 50.8 mm and a height of 50.8 mm. The side flanges have a thickness of 9.2 mm.