

Weather Station Jupiter & Europe



Features

- * Integrated weather station for wind speed, wind direction, an air temperature on station, an external air temperature and barometric pressure, with no moving parts technology
- * Maintenance-free measuring element with permanent air density compensation
- * Operation under severe climatologically conditions and wind speed up to 80 m/s
- * Solid-state controlled sensor heating device to prevent icing
- * Simple installation on a 50 mm standard pipe and central plug connector
- * Operational condition from $-40\text{ }^{\circ}\text{C}$ to $+70\text{ }^{\circ}\text{C}$
- * Rugged and corrosion-free housing with integrated plug connector
- * Serial interface RS485
- * MTBF of 10 years
- * Automatic cyclic self-testing and reporting

Applications

- * The Jupiter & Europe is especially designed for very cold environmental conditions in the mountains or in arctic. No calibrations or periodic maintenances are required. The Jupiter & Europe reports wind speed and direction, an air temperature on station, an external air temperature (for example at 0,3m height) and barometric pressure.

Standards

- * Standard of construction: VDE 100
- * Low voltage guideline: 73/23 EWG and VDE 100
- * EMV: DIN EN 50081-1
VG 95373
EC 630004-3,-6
- * ESD / Burst: EC 630004-2,-4
- * Vibration: BV 0440, diagram 1,8,9
- * Shock resistance: BV 0430, diagram 3
- * Salt spray test: MIL STD 810 D
- * Class protection: IP 67
- * Message format: HEX or NMEA 0183
- * Interface: RS485

Technical Data & Dimensions

General

Operation temperature range	-40 °C to +70 °C
Storage temperature	-50 °C to +90 °C
Interface	RS485
Power supply	12 or 24 VDC / 15 Watt
Isolation voltage	500 VDC

Measurement Specifications**Wind speed**

Range	0...80 m/s
Accuracy (RMS)	0.5 m/s \pm 5 % of actual wind
Resolution	0.1 m/s

Wind Direction

Azimuth	0...360° (no electrical gap)
Accuracy (RMS)	\pm 3°
Resolution	1°

Air Temperature On Station

Range	-40...70 °C
Accuracy (RMS)	\pm 1°C at wind speed \geq 2m/s
Resolution	0.1°C

Barometric Pressure

Range	600...1100 mbar
Accuracy (RMS)	\pm 1.5mbar at 20°C \pm 3 mbar, -40°C to +70°C
Resolution	0.1 mbar

External Air Temperature

Range	-40...70 °C
Accuracy (RMS)	\pm 1°C at wind speed \geq 2m/s
Resolution	0.1°C

Option**Digital Counter**

Range	16-bit counter
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Mechanical**Jupiter**

Class of protection:	IP 67
Height:	300 mm
Diameter:	105 mm
Weight:	1.5 Kg
Mast adapter:	51 mm

Europe

Class of protection:	IP 67
Height:	165 mm
Diameter:	80 mm
Weight:	0.7 Kg
Mast adapter:	51 mm

Note: See also mechanical drawings for installation

Accessory (not included)

Mating connector for cable

Version**Jupiter & Europe**

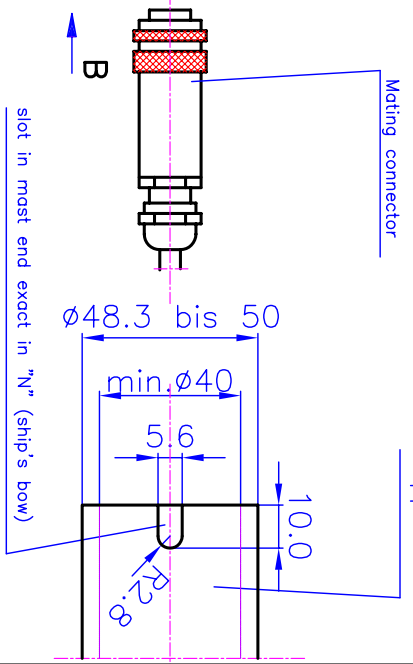
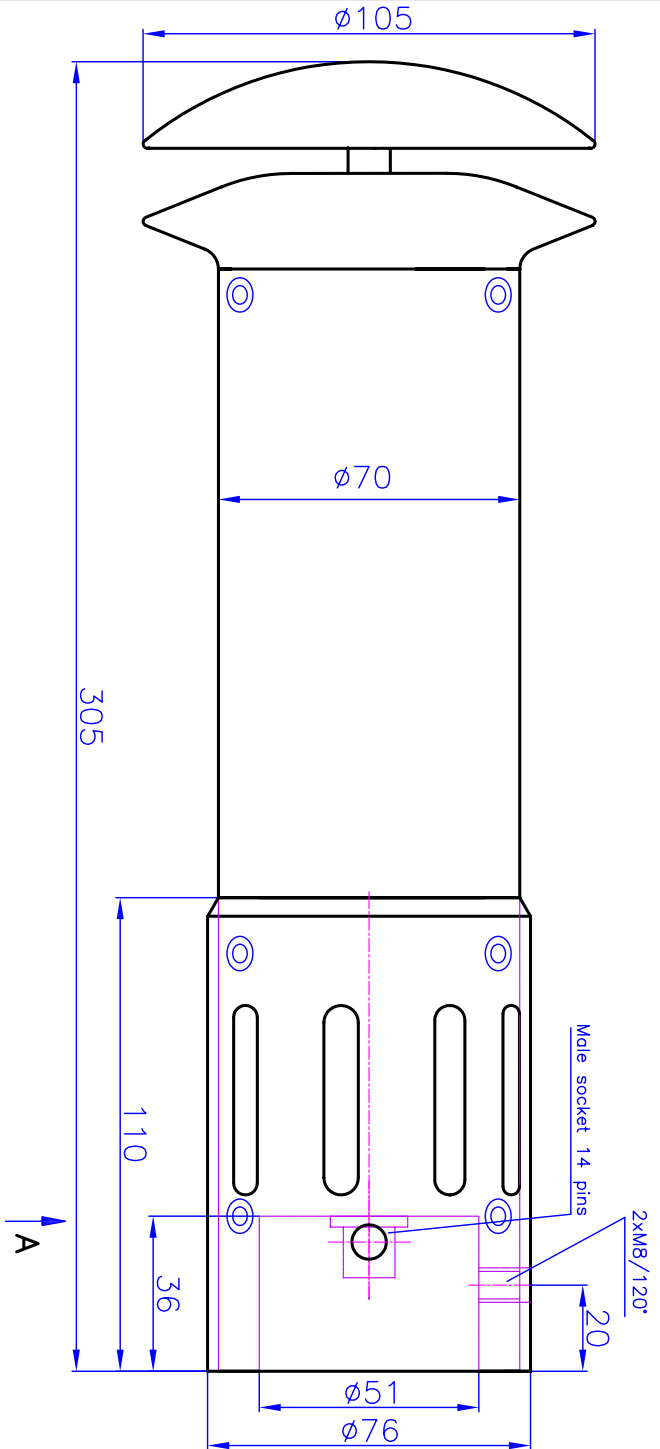
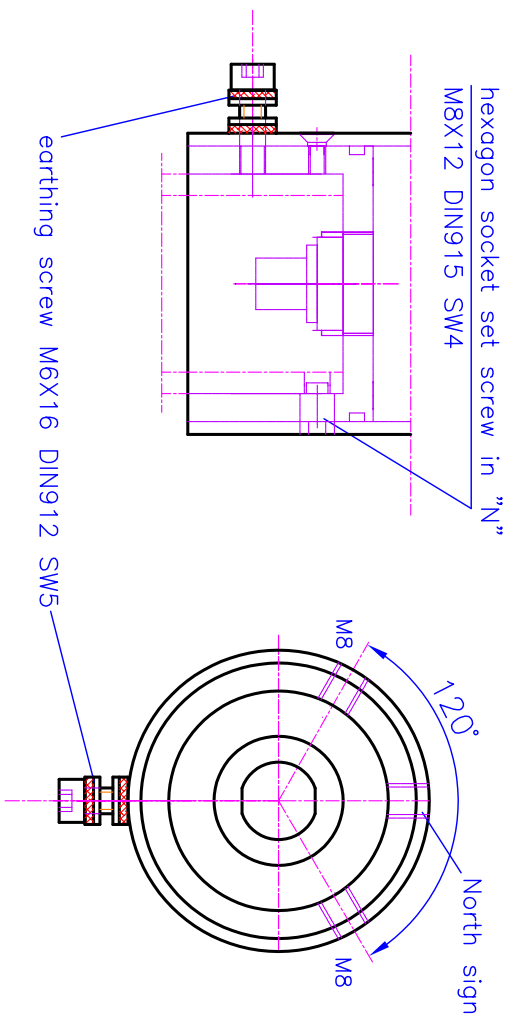
Heated, compact and robust weather station for wind speed, wind direction, an air temperature on station, an external air temperature and barometric pressure, with serial interface RS485

Note:

For digital counter, please specify in the request. The standard communication protocol is in HEX, but it is also available in NMEA 0183 (send us a request for detail about communication protocol)

View from A

View from B

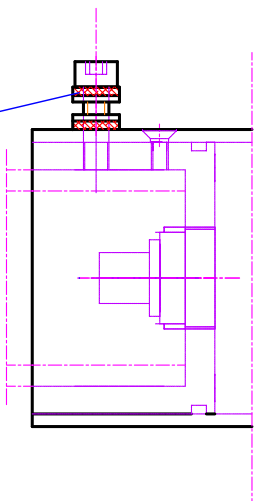


Sensor seat pipe
Expl. pipe 48.3x2.6 or
pipe 50x2.5 or
pipe 50x2

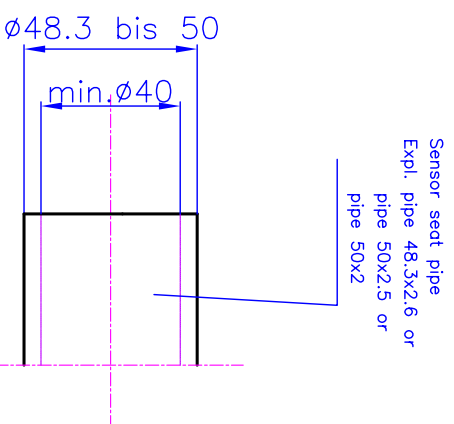
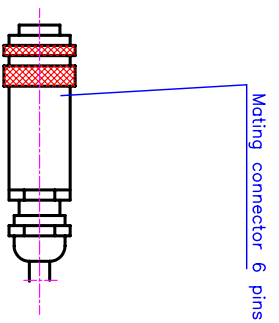
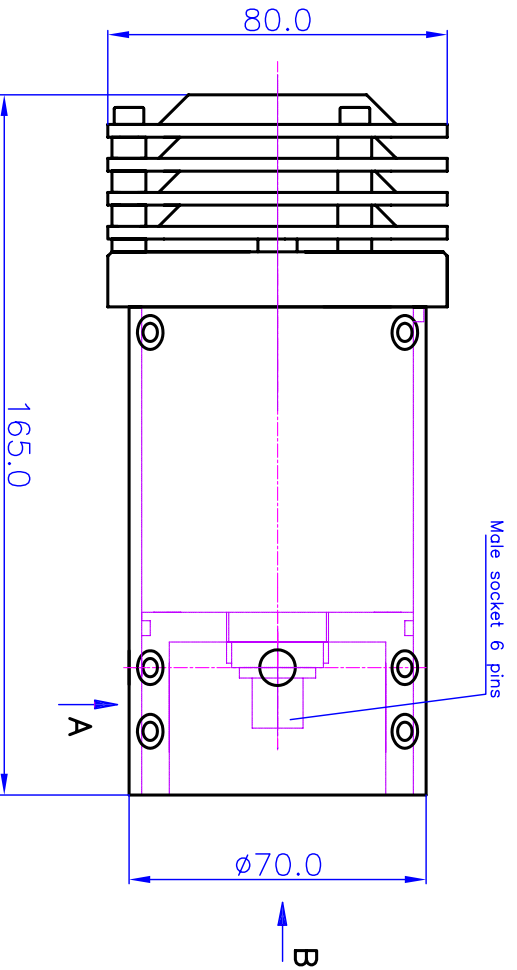
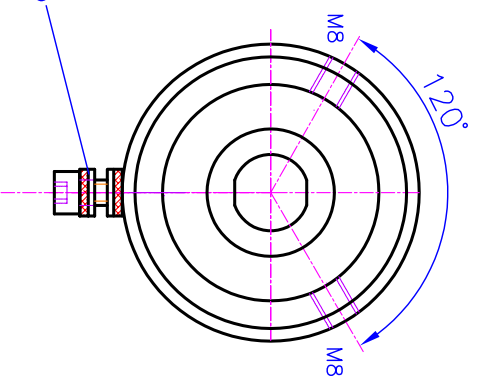
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View from A



View from B



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Europe

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