





Suitable for wind speed and direction measurement - general purpose wind measuring applications - corrosion resistant applications

# Datasheet SYN-710-3000 series with 4-20mA output Wind speed & direction sensors

The Synchrotac SYN-710-3000 Series is the latest in the successful range of SYN-710 wind instruments and offers an integrated loop powered 4 - 20mA output.

The sensors are designed for general-purpose wind measuring applications. They are constructed from corrosion resistant materials and incorporate precision sealed stainless steel bearings for reliability and low starting threshold. The sensors can be individually mounted directly to a pipe mast with a  $\frac{1}{2}$  inch BSP male thread or as a pair on the optional cross arm or mounting sickle.





### Anemometer model SYN-710-3900

The Synchrotac SYN-710-3900 wind vane uses a precision potentiometer to produce a 4 - 20mA output and it is also loop powered.

Vane length	335mm
Circle diameter	382mm
Body diameter	41.5mm
Overall height	252mm
Mass of vane	235g
Weight	675g
Mounting	1/2 inch BSP female thre
Body & vane material	Brass
Bearings	Two stainless steel rolle
	sealed with low viscosit
	lubricant
Mechanical travel	Mechanical - 360°
Electrical travel	Electrical - >340°
Signal output	4–20mA corresponding

Response time Power Requirements Connection Electrical load

Operating temperature

675g 1/₂ inch BSP female thread Brass Two stainless steel roller balls, sealed with low viscosity lubricant Mechanical - 360° Electrical - >340° 4–20mA corresponding to 0°- 359° 200ms nom 12VD - 30VDC 5 pin <500 ohms for 24VDC loop power -20°C to +60°C

#### Anemometer model SYN-710-3500

The Synchrotac SYN-710-3500 wind speed sensor (anemometer) offers a 4-20mA output and is loop powered. The default span is 0 to 100km/hr but other spans may be ordered up to 150km/hr.

Cup diameter	45mm
Circle diameter	130mm
Body diameter	41.5mm
Body height	170mm
Mass of cup set	20g
Weight	565g
Mounting	1/2 inch BSP female thread
Body material	Brass
Cup set material	Fiberglass reinforced phenolic
Bearings	Two stainless steel roller
	balls, sealed with low viscosity
	lubricant
Transfer coefficient	0.0526 km/hr per rpm
	0.9m of wind run per
	revolution
Wind speed	Over 50m/sec (180km/hr)
Transducer	DC generator
Starting threshold	<0.7m/sec
Signal output	4 –20mA = 0 – 100km/hr
Response time	200ms nom
Power requirements	12VD - 30VDC
Connection	3 pin (2 pin optional)
Electrical load	<500 ohms for 24VDC loop
	power
Operating temperature	-20°C to +60°C

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## Solutions beyond expectations

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Germany, the Netherlands, Singapore and the United Kingdom.

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