



Applications

- General Meteorology
- Wind Energy
- Construction sites
- Offshore Oil and Gas
- Aviation
- Sports

Features and Benefits

- Small dimensions
- Low-threshold starting speed
- Resistant to all weather conditions
- Anodized aluminum and plastic
- Different output signal
- Type calibrated in wind tunnel
- Minimal maintenance
- Suitable for national met office

Wind transmitter VMT107A is a small dimensions, digital optoelectronic sensor for wind speed and wind direction measurements. It is made from naturally anodized aluminium. Quality sealed ball bearings are used for both speed and direction measuring systems.

For wind speed part of the sensor a lightweight three-cup assembly (Robinson's cup) is used which, with a stroboscope disc and optoelectronic elements, gives frequency output proportional to the wind speed.

For the wind direction a square rudder is mounted on the axis of coding disc. In combination with the optoelectronic elements, this gives coded data on 6-bit Grey's coding system.

All electronic elements are protected against over-voltages by resistors and Zener diodes. Normal additional mechanical load (freezing) cannot damage the sensor.

On the bottom of VMT107A there are support for mounting the sensor and 10-pole connector.

Optional output: voltage, current, RS232, RS485 or SDI.

Technical specifications

	WIND SPEED	WIND DIRECTION
Measuring range	0 m/s – 50 m/s	0° to 360°
Starting speed	0.5 m/s	0.5 m/s
Distance constant	aprox. 3m fluid flow past the sensor required to cause it to respond to 63,2%	
Accuracy	+/- 0,5 m/s	+/- 2,75°
Resolution	0,1 m/s	5,5°
Sensitivity	20 imp/m	
Measuring system	stroboscopic disk, optoelectronic transducer	optoelectronic transducer
Output signal	pulse signal frequency 1 kHz at 50 m/s	6-bit grey code
Optional output signal	voltage output 0...10V, current output 4...20 mA, RS232, RS485 serial communication (9600/8,N,1) or SDI	
Power supply	12 VDC	
Power consumption	12 mA	
Operating temperature	-40 to + 60 ° C	
Storage temperature	-50 to + 80 ° C	
Connector	Souriau, 10-pole, weatherproof	
Cable	9 wire, shielded	
Dimensions	φ 300 x H 240 mm	
Mass	400 g	
Mounting	mounting bracket, hole φ 6mm	
Material	body - anodized aluminium Robinson's cup - UV stabilized plastic	

The sensor connector must be facing SOUTH

Cable connection



View from below
(soldering side)



Cable LIYCY 10x0,14

SOURIAU 10 M	COLOR	FUNCTION
A	RE	D1
B	PI	D2
C	BL	D3
D	GR	D4
E	YE	D5
F	BR	+12V
G	VI/BL	GND
H	Shield	⏏
J	WH	H
K	GR	D0

