



LOW POWER CONSUMPTION PULSE OUTPUT ANEMOMETERS

In response to demand for a low power, pulse output only version of the A100L2 anemometer, a version has been produced suitable for use with most data loggers. These A100LK and A100LM anemometers typically consume as little as 1mA while operating from the logger's 5V supply.

- ▶ **TRIED & TESTED 'PORTON ANEMOMETER' MECHANICS AND ROTOR**
- ▶ **A100LK: 10HZ PER KNOT PULSE/FREQ O/P (0 TO 1500HZ = 0 TO 150 KNOTS)**
- ▶ **A100LM: 10HZ PER M/S PULSE/FREQ O/P (0 TO 750HZ = 0 TO 75 M/S)**
- ▶ **/PC3 ANTI-SURGE PROTECTION OPTION**

Specification Summary:

Range of Operation:	Threshold:	0.3Kts (starting speed: 0.4Kts, stopping speed: 0.2Kts)
	Max. windspeed:	150Kts (75m/s)
	Standard measuring range:	A100LK: 0 to 150 Knots A100LM: 0 to 75 m/s
Rotor:	Type:	R30, 3-cup rotor
	Distance Constant:	2.3m ±10%
Pulse Output:	Rotor speed measurement:	By interruption of optical beam
	Accuracy:	0.2Kts (0.2 - 20Kts), 1% of reading (20 - 110Kts), up to 2% of reading (110 - 150Kts)
	Non-linearity:	0.4% full range output frequency (correction curve supplied)
	Output Range:	A100LK: 0 to 1500Hz for 0 to 150 Knots (10Hz per Knot) A100LM: 0 to 750Hz for 0 to 75 m/s (10Hz per m/s)
	Resolution:	A100LK: 5.15 cm A100LM: 10 cm
	Pulse Output:	High: 4.2v max, 3.6v min Low: <0.2v Minimum load resistance: 20K Ohms Rise/Fall time: 25us approx., duty cycle 50%(±25%)
General:	Operating Temperature Range:	-30 to +70 °C
	Supply Voltage:	4.75V to 28V DC
	Power-up Time:	2 sec
	Current consumption:	1mA typical (1.3mA max) with no output load
	Standard Cable:	3m long, 6 core screened 7/0.2mm, PVC insulated
Connections:	Red = Supply positive, Blue = Supply negative, Green = Output -, Yellow = Output - White = Pulse output, Black = Base plate, (Yellow & Green are connected to Blue in the instrument) Note: cable screen is not connected at anemometer	
Calibration:	Calibration data for the anemometer and rotor are provided at one test speed to an accuracy of 1% at +15°C	
Anti-surge options:	/PC3 variants have an extra surge protection module containing series resistance elements and clamping devices fitted to the base of the module in the standard anemometers. Note that these protection elements slightly affect certain specification parameters	
Mechanical:	Dimensions, mm / Weight:	195 height x 152 rotor diameter x 55 body diameter. Net Weight: 490g
	Mounting:	0.25 inch BSW/UNC screw into base (standard tripod fitting)

(Vector Instruments reserves the right to change this specification without notice in line with a policy of continued product improvement)

(THIS IS A PROVISIONAL SPECIFICATION AND MAY BE SUBJECT TO CHANGE)