Snow level sensor



- Ultra-sonic technology with wide range temperature compensation
- Snow distance/depth and air temperature measurements
- Present weather information: snow intensity, snow starting time (RS485)
- Analogue (4...20 mA) and digital (RS485 Modbus) outputs
- Air temperature compensation
- Low power consumption

The robust design of DQL011.1 makes it the ideal solution for reliable measurement of snow-depth in extreme conditions. The additional air-temperature detection feature guarantees precise readings over a wide temperature range. The powerful ultrasonic impulses emitted by this sensor deliver reliable readings even when there is a difficult reflection ratio, as is the case with powdery or fresh snow. The sensor is characterized by a high level of operating reliability, low energy consumption and ease of use in the field.

Technical Specifications

PN	DQL011.1	
Snow level	Principle	Ultra-sonic (frequency 50 kHz)
	Range	0.7...10 m (snow distance from the sensor)
	Resolution	1 mm
	Accuracy	± 1 cm
	Beam width	12°
Air temperature	Principle	Semiconductor in radiant shield
	Range	-40...60 °C
	Resolution	0.1 °C
	Accuracy	< 0.15%
General Information	Power supply	10.5...15 V DC
	Power consumption	Max 200 mA, 5 mA (stand-by)
	Energy consumption	0,5 Ah/day (1 min measuring interval)
	Output 1	N.2 4...20 mA 1. Snow level or distance 2. Air temperature
	Output 2	• RS485 (Modbus RTU) • Snow depth • Snow distance • Air temperature • Snow intensity (present weather) • Snowing starting time

	Operative temperature	-40...60 °C
	Material	Aluminum
	Installation	H=3...10 m (it is suggested that the sensor be installed at least 1 m higher than the maximum expected snow level) Using DYA047 support on Φ 45...65 mm mast
	Near blanking distance	0.7 m (distance from which the sensor makes the measurement)
	Connector	12 pin-connector (cable not included)
	Protection grade	IP66
	Dimensions	320 mm; Ø 180 mm
	Weight	1.2 kg
	Data logger compatibility	E-Log, Alpha-Log

Accessories

	DYA047	Support for DQL011.1 on meter pole Ø 50 mm (maximum height: 4m)
	MN1090.5RI	Cable L= 5 m
	MN1090.10RI	Cable L= 10 m
	MN1090.15RI	Cable L= 15 m
	MN1090.20RI	Cable L= 20 m
	MN1090.25RI	Cable L= 25 m
	MN1090.50RI	Cable L= 50 m

LSI LASTEM Srl
Via Ex SP. 161 Dosso, 9
20049 Settala (MI)
Italy

Tel. +39 02 954141
Email info@lsi-lastem.com
www.lsi-lastem.com