

## Snow level sensor



- ▶ Ultra-sonic technology with wide range temperature compensation
- ▶ Snow Distance/Depth and Air temperature measurements
- ▶ Present weather information: Snow intensity, snowing 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	
<b>Snow level</b>	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°
<b>Air temperature</b>	Principle	Semiconductor in radiant shield
	Range	-40...60 °C
	Resolution	0.1 °C
	Accuracy	< 0.15%
<b>General Information</b>	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	<ul style="list-style-type: none"> <li>• RS485 (Modbus RTU)</li> <li>• Snow depth</li> <li>• Snow distance</li> <li>• Air temperarure</li> <li>• Snow intensity (Present weather)</li> <li>• Snowing starting time</li> </ul>

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 $\Phi$ 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, $\Phi$ 180 mm
Weight	1.2 kg
Data logger compatilby	E-Log, Alpha-Log

### Accessories

<b>DYA047</b>	Support for DQL011.1 on meter pole $\Phi$ 50 mm (maximum height: 4m)
<b>MN1090.5RI</b>	Cable L= 5 m
<b>MN1090.10RI</b>	Cable L= 10 m
<b>MN1090.15RI</b>	Cable L= 15 m
<b>MN1090.20RI</b>	Cable L= 20 m
<b>MN1090.25RI</b>	Cable L= 25 m
<b>MN1090.50RI</b>	Cable L= 50 m