

# ROAD SURFACE TEMPERATURE, ROAD CONDITIONS, WATER FILM

## DQA356



This sensor accurately reports the following parameters:

- ▶ Road surface temperature
- ▶ Road conditions
- ▶ Water film thickness on the pavement.



Different versions of the same sensor are made to measure also the underground temperature using separate sensor units. DQA356 has RS485 output with an open protocol suitable for connection to LSI LASTEM and Boschung data loggers as well as third part integration systems. DQA356 sensor is made by Boschung Mecatronic AG.

### Technical Specifications

Code	DQA356.0C	DQA356.0E	DQA356.1E	DQA356.2E
				
Including underground temperature sensors (number)	No	No	1	2
Application	Airport	Roads		
Housing	Included Housing with internal connectors. It allows a very easy and fast connection of the sensor when the housing is fixed on the road surface. It makes this sensor becomes very suitable in airports applications	Included Housing with internal terminals to sensors		
Cable	Not included BOS998 cable (each meter) BOS999 connector	L = 30 m included (connection by terminal inside the housing) Other cable length possible (BOS998)		



**Common Technical Specifications**

<b>Pavement surface temperature</b>	Measurement range	-40÷80°C
	Accuracy	15÷10°C: ± 0,2°C; 0 ± 0,8°C
	Resolution	0,1°C
<b>Surface condition</b>	Measurement	N.5 status: Dry, Wet, Moist, streaming water, Slippery (EN15518-3)
<b>Water film thickness</b>	Measurement range	0÷10 mm
	Accuracy	0,2÷3 mm: ± 30%
	Resolution	0,01 mm
<b>Separate underground Temperature (0, 1 or 2 temperatures). The "n" after the PN indicates the number of separate sensors</b>	Measurement range	-30÷75°C
	Accuracy	1°C
	Resolution	0,1°C
	Cable length	43 cm
<b>Output</b>	Output	RS485
	Protocol	Open protocol E-Log compatibility
<b>Power supply</b>	Power supply	12 ÷ 24 Vdc
	Power consumption	< 0,5W a 12 Vdc
<b>Others</b>	Dimensions	<ul style="list-style-type: none"> <li>• Sensor: 90 mm Ø; 42 mm depth</li> <li>• Housing (roads): 135 mm Ø; 51 mm depth</li> <li>• Housing (airports): 330x150x43 mm</li> </ul>
	Weight	<ul style="list-style-type: none"> <li>• Sensor only 1,1kg</li> <li>• Housing (roads): 0,5 kg</li> <li>• Housing (airports): 3,8 kg</li> </ul>
	Protection	IP68
	CE	EN61000-6-1; EN61000-6-2 EN61000-6-3; EN61000-6-4
	MTBF	>60.000 ore

**Accessories**

	<b>BOS998</b>	Cable for DQA356.nC sensor Extra cable for DQA356.nE (each meter)
	<b>BOS999</b>	Connector for DQA356.nC sensor (to be purchased with the cable)
	<b>MW3030</b>	Prodofix resin for installation of the sensors housing inside the concrete

