



## IT-ARCTIS

Active pavement sensor for measurement of freezing point temperature

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## Technical data

### MEASUREMENTS

Freezing point temperature	-30... 0°C
Accuracy	from -15°C to +0°C: ±0.5°C otherwise: ±1.5°C
Resolution	0.1°C

### Communication

Interface	RS485
Protocol	Boschung proprietary or open text protocol using ASCII codes

### CASING

	Stand-alone	Econ case (road application)	Rectangle case (airport application)
			
Integrated cable	Standard: 30 m, longer on demand		-
Cable type	specific: one pair 1.5 mm <sup>2</sup> (power supply) + one pair 0.5 mm <sup>2</sup> (RS485)		
Cable splicing	up to 600 m (depending on power supply)		
RS485 extension cable (recommended)	twisted pair, shielded, ø 0.53 mm		
Dimensions	ø90 mm x 42 mm	ø135 mm x 51 mm	330 x 154 x 43.2 mm
Weight (with standard cable)	4.2 kg	4.6 kg	8.4 kg

→ Electrical characteristics:

- Power supply: 24 to 48 VDC
- Consumption: < 0.5 W @ 24 VDC,  
peak : 16 W (30m cable)

→ Environmental characteristics:

- Operating temperature: -40... +80°C
- Enclosure rating: IP68
- MTBF: > 60'000 h
- Chemical resistance: Excellent resistance to chemical agents

→ International standards:

- EMC compatibility:
  - EN 61000-6-1 (immunity / residential environment)
  - EN 61000-6-2 (immunity / industrial environment)
  - EN 61000-6-2 (immunity / industrial environment)
    - ESD: EN 61000-4-2 with ±25 kV (instead of 8 kV)
    - Burst: EN 61000-4-4 with ±4 kV (instead of 1 kV)
    - Surge: EN 6100-4-5 with ±2 kV (instead of 1 kV)
  - EN 61000-6-3 (emission / residential environment)
  - EN 61000-6-4 (emission / industrial environment)