

Asphalt surface temperature sensor

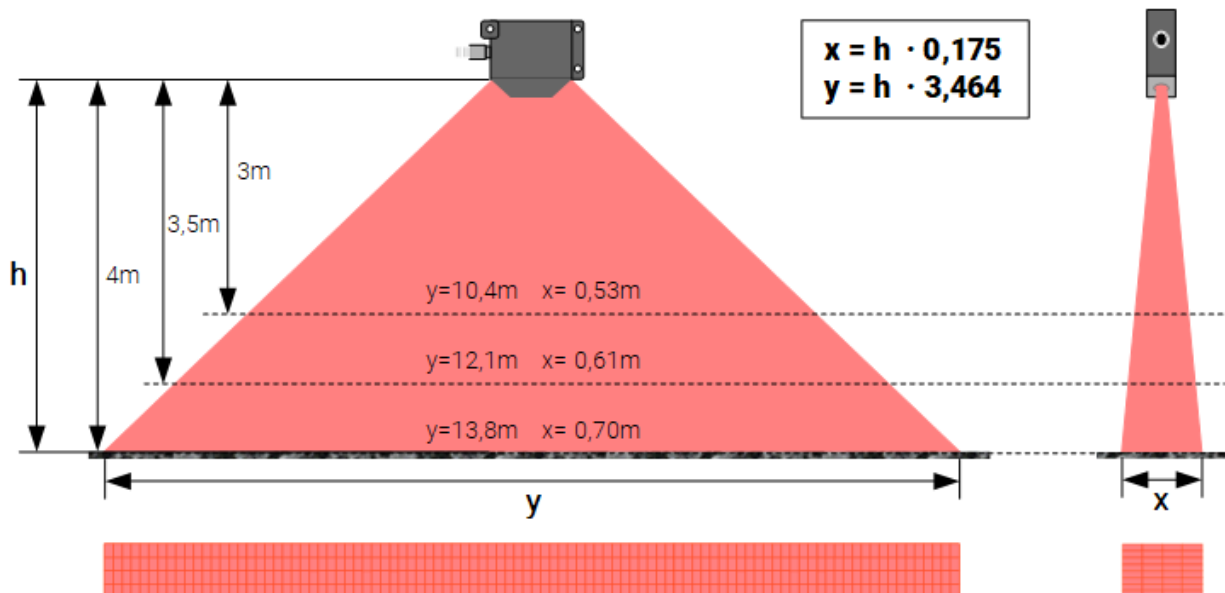
Infrared CAN matrix sensor with wide field of view

The matrix sensor, which has been specially optimized for measuring the asphalt surface temperature behind the screed of a paver, is characterized by its wide field of view. It is also compact in size and has no moving parts. The sensor can be integrated digitally via CAN bus.



Properties:

- CAN interface
- Matrix sensor with field of view of 120° x 10°
- Storage grid 25cm
- Measuring range is optimized for asphalt measurement
- Compact size without moving parts



Technical data:

Overall dimensions	(W/H/D) 94mm x 28mm x 80mm
Housing / protection class	Aluminum housing / IP69k (DIN EN 60529)
Weight	approx. 0,35kg
Connections	Built-in plug 5pole M12
Power supply	UB = 8..32V (reverse polarity protected), approx. 40mA at 12V
Sensor	Field of view: 120°x10° Storage grid: 25cm Measuring range: 50°C bis 300°C Accuracy: typ.. ±2°C (T _{Object} = 150°C T _{Environment} = 50°C)
Signal transmitter	1 optical signal transmitter (Housing LED)
Interfaces	1 CAN (max. baud rate: 1Mbit/s)
Operating temp. range	-40..85°C (Housing temperature)
EMC	Directive 2014/30/EU Road vehicles: ISO 10605, ISO 7637-1, ISO 7637-2, ISO 7637-3 Construction machinery: DIN EN 13766-1 Agricultural, forestry machinery: DIN EN ISO 14982 Industrial use: DIN EN 61000-6-2, DIN EN 61000-6-4
Mechanical, climatic resilience	Oscillation: DIN EN 60068-2-6 Shock, continuous shock: DIN EN 60068-2-27 Shocks due rough handling: DIN EN 60068-2-31 Cold: DIN EN 60068-2-1 Dry heat: DIN EN 60068-2-2 Temperature changes: DIN EN 60068-2-14 Damp heat: DIN EN 60068-2-30

Pin assignment, 5-pin M12 connector:

Pin-No.	Labelling	Description
1	SG	Signal ground
2	UB	Supply plus
3	DG	Supply ground
4	CH	CAN high
5	CL	CAN low

Overall dimensions:

