

IceLoad Sensor



Key applications



Transmission towers



Air line cable cars



Wind turbines in cold climates

Reliably detect icing, proactively address risks and failures

Ice load is the weight of ice build-up on objects such as buildings, overhead power lines, wind turbines, and vegetation. In freezing rain and hoarfrost, ice load can reach problematic and damaging levels, especially when rising winds elevate the wind load as well. Ice load monitoring provides early warning of impending icing and enhances energy supply security.

The IceLoad Sensor leverages the gravimetric measurement principle, just like our worldwide known rain[e] weighing precipitation sensor. Its ice load measurement probe can calculate a maximum load of up to 20 kg.

**Up to
20.0 kg**

Measuring range

**2 % at
1 kg ice load**

Accuracy

**Only
3.3 kg**

Weight

BENEFITS



ISO 12494 standardized, meeting the European standard for accurate measurement of ice load



Maximum accuracy and a wide measurement range in a compact, low-weight unit



Full year-round functionality in an environmentally friendly package free from antifreeze

Contribution to the security of supply

At AEM, our LAMBRECHT weather sensors have been helping customers monitor and mitigate weather-related risk for over 160 years. The IceLoad Sensor is a lightweight and reliable solution that can optimize power potential, locate disturbances in delivery lines, and monitor key structures for ice-related strain.

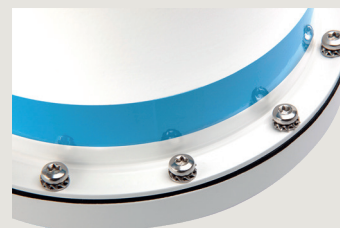
IceLoad Sensor Specifications

COMPONENT	SPECIFICATION
Id-No.	00.15300.000030
Measuring principle	Gravimetric (DMS)
Measuring range	0...20 kg
Measurement accuracy	2 % at 1 kg ice load
Measurement resolution	1 g
Signal output	Modbus RTU, RS-485
Operating conditions	-40...+70 °C (heated)
Supply	24 VDC, 3.34 A (80 W)
Dimensions	714 x 180 mm
Weight	3.3 kg
Standards	ISO 12494
Material housing	Seawater resistant aluminum

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Key features

- Durable seawater resistant aluminum construction, ideal for harshest weather conditions
- Compact, lightweight design
- Measures ice loads up to 20 kg
- Reliable communication with Modbus RTU protocol
- Easy to install and maintain
- Environmentally friendly with full functionality all year
- Compatible with wide range of data loggers



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To learn more about our innovative solutions, visit aem.eco or contact us at info@aem.eco