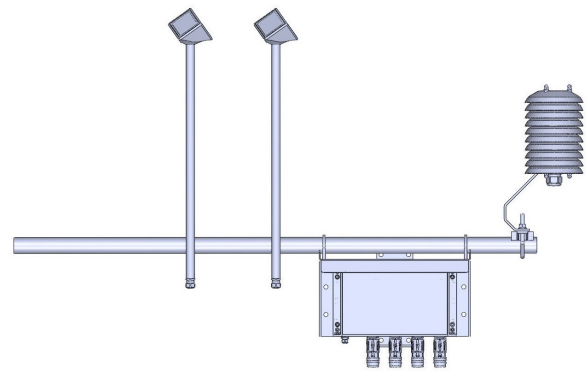


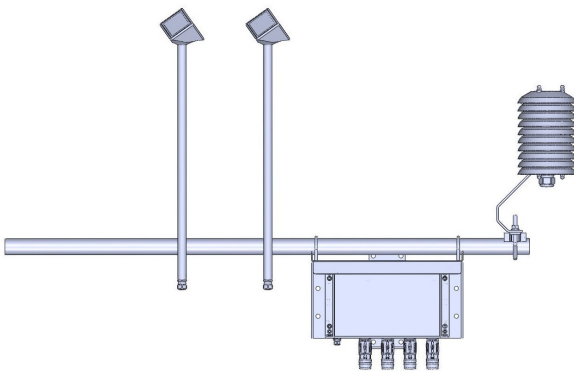
IDS-20a

Icing measurement system



During the winter season a lot of our infrastructure is affected by icing. In the transportation sector icing may not only impair the proper functioning of engines, sensors and signaling

systems but may also pose serious hazards through icy runways and ice accretion on airplanes. Power generation by wind turbines solar- and hydroelectric generators may not be reliable under icy conditions and power transmission may be interrupted by heavy ice loads on power lines. Last but not least, ice on a building or other structure, e.g. antenna, may add a lot of weight and increase the surface area exposed to wind.



Versions

Art	Version
20848	IDS-20a Bundle for ice layers 0.1 mm to 1 mm (single sensor); continuous icing-monitoring in aviation

Scope of delivery

Qty	Name
1	IDS-20a controller
1	2x Cube 1 ice sensor
1	Temperature and relative humidity probe
1	Radiation shield
1	Mounting pole \varnothing 34 x 800 mm

Qty	Name
1	Mounting brackets for controller, sensors and radiation shield
1	MAIN sensor cable
1	USB to RS485 isolated converter cable
1	Manual and Commander Software on USB stick

Accessories

Art	Accessories
20557	Heating transformer 230/24V, 160VA, IP00
20519	IDS-20 Main-cable 10 m
21150	USB to RS485 isolated converter cable

Specifications

IDS-sensors		
Sensor type	Cube sensor 5	Cube sensor 1
Measuring range ice thickness	0.1...4 mm	0.01...1 mm
Weight	0.7 kg	0.7 kg
Length	560 mm	560 mm

T/rH-sensor	
Dew point	-20...+20 °C
Frost point	-20...+20 °C
Air temperature	-40...+60 °C
Air humidity	0...100 %
Weight	0.715 kg
Size L x W x H	310 x 120 x 165

IDS-controller

Power supply	Sensors 10...28 VDC Heating 24 VDC integrated overvoltage protection
Power consumption	Active measurement 50 mA at 12 VDC Heating max. 5A at 24 VDC
Output	RS-485 (Modbus) SDI-12 3x relay output, max. 0.8 A each
Operating temperature	-40...60 °C
Protection rating	IP 66
Lightning protection	Integrated Lightning Protection against indirect Lightning; discharge capacity 0,6 kW Ppp
Size L x W x H	318 x 208 x 132 mm
Weight	3.6 kg

