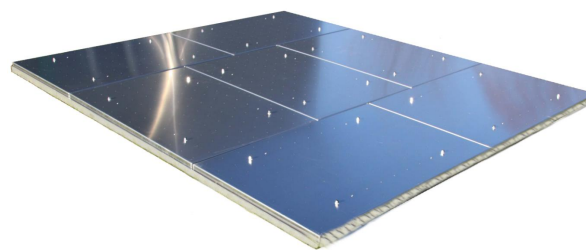# SSG-2

Snow scale for SWE determination

The SSG-2 snow scale is a precision device for measuring the snow water equivalent (SWE) of a snow pack. It has been developed for easy installation in the field and is equipped with specially designed aluminium panels which guarantee accurate measurements. These panels form a wide frame around the scale to minimize the effects of ice-bridging. The use of lightweight aluminium reduces thermal resistance, thus improving heat flow through the device. The SSG-2 is equipped with analog and digital ports, which allow integration into weather stations and other monitoring systems.

Versions

Art	Version
20756	Snow scale SSG-2, 0 ... 1000 kg/m²
20757	Snow scale SSG-2, 0 ... 2000 kg/m²
20758	Snow scale SSG-2, 0 ... 3000 kg/m²

Scope of delivery

Description	Quantity
L-shaped aluminium profile	2
U-shaped aluminium profile	6
Aluminium panels	7
Marking rods	4
SSG-2 scale	1
Spacer bolt M8 Nut M8	24 24
Hex-head bolt M8x25 Washer M8	2 2
Hex-head bolt M6x16 Washer M6	1 2
Hex-head bolt M6x12 Washer M6	12 13
Hex-head bolt M5x12 Washer M5	8 9

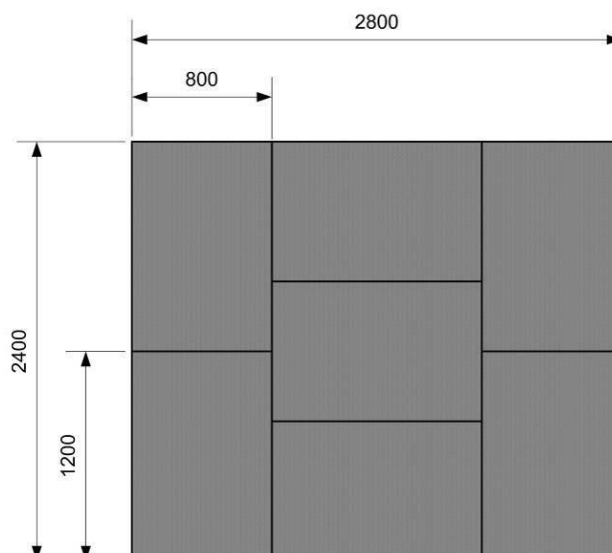| Description	Quantity
Clips	8
Blanking plug	2
Flat wrench (10 and 13 mm)	1
Hex-spanner head M8	1
MAIN sensor cable SSG-2, 10 m	1
Manual and Commander Software on USB stick	1

Accessories

Art	Accessories
20488	Commander support software
21115	USB to RS485 isolated converter cable
20613	MAIN sensor cable SSG-2, 10 m
20938	MAIN sensor cable SSG-2, 20 m
20862	Ground temperature sensor SSG-2, -40 ... 60°C
17642	Set of Z-profiles for rooftop-mounting
22524	Universal extension box for cable extension

Specifications

Physical and environmental	
Power supply	9...28 VDC; Reverse voltage protection, overvoltage protection
Power consumption at 12 VDC	max. 50 mA active <1mA in sleep mode
Outputs	RS-485 SDI-12 Analog output 4...20 mA (14 bit, max. load 200 Ω) Digital output (low: 0V, high: Vsupply, max. 30 mA at V_{supply}-0.5 V)

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Physical and environmental

Operating temperature	-40...60 °C (-40...140 °F)
Storage temperature	-40...60 °C (-40...140 °F)
Environmental humidity	0...100 %rH
Protection rating	IP 68
Lightning protection	Integrated protection against indirect lightning with a discharge capacity of 6 kA Ppp
Housing material	Aluminium
Size L x W x H	2800 x 2400 x 103 mm (110.24 x 94.49 x 4.06 inch)
Surface area	6.72 m²
Weight	110 kg (242.5 lb)
Max. inclination	5°

Snow water equivalent (SWE)

Measurement range	0 ... 1.000 mm SWE 0 ... 2.000 mm SWE 0 ... 3.000 mm SWE
Accuracy	0...500 mmWC: ±1 mmWC 500 mmWC ... Full scale: ±0.2 % of reading
Resolution	0.1 mmWC (0.1 kg/m²)
Measurement interval	10 s...3 h

Temperature measurement

Temperature sensor	Pt1000
Measurement range	-40...60 °C (-40...140 °F)
Accuracy	0.2 °C (0.35 °F)
Resolution	0.01 °C (0.02 °F)

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