Naps module specifications 26/11/10

Solrif frame modules, 36 cells, smooth glass ***black frame, white backsheet***

	Luosto Sf	Luosto Sf	Luosto Sf
Module name	**125 SBW**	**130 SBW**	**135 SBW**
cell type	poly	poly	poly
product status	standard	standard	standard
main use	roof integrated grid	roof integrated grid	roof integrated grid

	Luosto Sf	Luosto Sf	Luosto Sf
Power Specifications	**125 SBW**	**130 SBW**	**135 SBW**
Maximum Power, Wp	125	130	135
Maximum Power Tolerance	+5W/-0W	+5W/-0W	+5W/-0W
Current (typical A at max power), Im	7.52	7.68	7.84
Voltage (typical at max power), Vm	16.6	16.9	17.2
Short Circuit Current (typical A), Isc	8.40	8.45	8.49
Open Circuit Voltage (typical), Voc	21.8	22.0	22.2

The above values refer to standard test conditions of 1000 Wm^{-2} solar irradiance, 25°C cell temperature, Air Mass 1.5.

	Luosto Sf	Luosto Sf	Luosto Sf
Product codes	**125 SBW**	**130 SBW**	**135 SBW**
can refer to versions of these modules made with different cell types		13133	N00119

Mechanical Details, common to all models in this sheet

Overall length mm	1525
Overall width mm	697
Thickness at edge mm	17
Weight kg	11.1

Construction, common to all models in this sheet

Cells	36
Cell type	poly
Cell dimensions mm	156x156
Cell layout	4x9
Cell electrical circuit	36Sx1P
Glass thickness	3mm
No of mounting holes	0
Mounting hole diameter mm	n/a
Junction boxes	1
Junction box type	S1410-2
Bypass diodes factory fitted	2
Prefitted cables with connectors	2 x 1m cables 4 sq mm
Connector identification	H+S

Maximum system voltage 750 V dc

NOCT, common to all models in this sheet

Normal Operating Cell Temperature 47

Cell temperature at 800Wm^{-2}, 20°C ambient temperature, wind speed <=1ms^{-1}, free air access to module rear

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Supplementary Information

Performance at Standard Test Conditions of 1000 Wm-2 solar irradiance, 25°C cell temperature, Air Mass 1.5.

	Luosto Sf 125 SBW	Luosto Sf 130 SBW	Luosto Sf 135 SBW
Maximum Power, Wp	125	130	135
Maximum PowerTolerance	+5W/-0W	+5W/-0W	+5W/-0W
Current (typical A at max power), Im	7.52	7.68	7.84
Voltage (typical at max power), Vm	16.6	16.9	17.2
Short Circuit Current (typical A), Isc	8.40	8.45	8.49
Open Circuit Voltage (typical), Voc	21.8	22.0	22.2
Module efficiency	11.8%	12.2%	12.7%
Efficiency of cells in module	14.3%	14.8%	15.4%

Performance at NOCT Conditions of 800 Wm-2 solar irradiance, 47°C cell temperature, Air Mass 1.5.

	Luosto Sf 125 SBW	Luosto Sf 130 SBW	Luosto Sf 135 SBW
Maximum Power, Wp	88.3	92.1	96.2
Current (typical A at max power), Im	6.22	6.08	6.23
Voltage (typical at max power), Vm	14.2	15.2	15.4
Short Circuit Current (typical A), Isc	6.80	6.84	6.87
Open Circuit Voltage (typical), Voc	19.7	19.9	20.1

Performance Ratio at other operating conditions

	Luosto Sf 125 SBW	Luosto Sf 130 SBW	Luosto Sf 135 SBW
Performance Ratio at 800/NOCT:	88.3%	88.6%	89.1%
Performance Ratio at 200W/sq m:	86.7%	89.3%	92.4%

Temperature coefficients at 1kW/sq m

	Luosto Sf 125 SBW	Luosto Sf 130 SBW	Luosto Sf 135 SBW
Max power (% / degree), approx	-0.55%	-0.54%	-0.53%
Short circuit current mA / deg C	4.0	4.0	4.0
Open circuit voltage V / deg C	-0.078	-0.078	-0.078

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Specifications may change without notice due to Naps continuous product improvement policy.

Please check actual specifications before ordering.

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