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# XSERIES

## MICROMORPH

Electrical Data at STC *			X 105	X 110	X 115	X 120	X 125	X 130
Maximum Electrical Output (+/-3 %)	$P_{max}$	[W <sub>p</sub> ]	105	110	115	120	125	130
Voltage at $P_{max}$	$U_{mpp}$	[V]	96	97	97	98	98	99
Current at $P_{max}$	$I_{mpp}$	[A]	1.08	1.13	1.18	1.24	1.29	1.34
Open Circuit Voltage	$U_{oc}$	[V]	131	132	132	132	132	133
Short Circuit Current	$I_{sc}$	[A]	1.33	1.37	1.41	1.45	1.49	1.53
Temperature Coefficient of $P_{max}$	$\alpha P_{max}$	[%/K]	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25
Temperature Coefficient of $U_{oc}$	$\alpha U_{oc}$	[%/K]	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30
Temperature Coefficient of $I_{sc}$	$\alpha I_{sc}$	[%/K]	+0.07	+0.07	+0.07	+0.07	+0.07	+0.07
Maximum System Voltage	$U_{sys}$	[V]	1,000	1,000	1,000	1,000	1,000	1,000
Open Circuit Voltage, initial	$U_{oc, initial}$	[V]	133	134	134	134	134	135
Short Circuit Current, initial	$I_{sc, initial}$	[A]	1.44	1.48	1.53	1.57	1.61	1.66

\* STC: 1,000 W/m<sup>2</sup> irradiance strength with a spectrum of AM 1.5 at a module temperature of 25 °C

Electrical Data at NOCT **			X 105	X 110	X 115	X 120	X 125	X 130
Voltage at $P_{max}$	$U_{mpp}$	[V]	88.3	89.3	89.3	90.2	90.2	91.1
Current at $P_{max}$	$I_{mpp}$	[A]	0.89	0.93	0.97	1.02	1.06	1.10
Open Circuit Voltage	$U_{oc}$	[V]	120.7	121.6	121.6	121.6	121.6	122.5
Short Circuit Current	$I_{sc}$	[A]	1.09	1.12	1.15	1.18	1.22	1.25
Normal Operating Cell Temperature	NOCT	[°C]	45	45	45	45	45	45

\*\* Electrical data is measured to the irradiance of 800 W/m<sup>2</sup> and a wind velocity of 1 m/s

Electrical Data at 200 W/m <sup>2</sup> ***			X 105	X 110	X 115	X 120	X 125	X 130
Voltage at $P_{max}$	$U_{mpp}$	[V]	87.9	88.9	88.9	89.8	89.8	90.7
Current at $P_{max}$	$I_{mpp}$	[A]	0.25	0.26	0.28	0.29	0.30	0.31
Open Circuit Voltage	$U_{oc}$	[V]	120.5	121.4	121.4	121.4	121.4	122.4
Short Circuit Current	$I_{sc}$	[A]	0.29	0.30	0.31	0.32	0.33	0.34

\*\*\* Electrical data is corresponding to the irradiance indicated above with a spectrum of AM 1.5 at a module temperature of 25 °C

All electrical data are averages of production data and is subject to a measurement tolerance of +/- 3 %. Inventux does not issue any guarantee for the accuracy of this data for future production batches. All data may be subject to change without prior notice.



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#### General Data

Module Type/Cells	Micromorph (a-Si/ $\mu$ c-Si)/99 cells, monolithic series connection
Design Certification	IEC 61646
Electrical Classification	A (IEC 61730)
Product Warranty/Output Guarantee*	5 Years / 10 Years on 90 % of $P_{min}$ , 20 Years on 80 % of $P_{min}$

\* Complete and most recent terms and conditions of warranty and guarantee shall prevail

#### Mechanical Data

Dimensions incl. Backbars (W x H x D)	1,100 mm x 1,300 mm x 40 mm (51.18 in x 43.31 in x 1.57 in)
Surface Area	1.43 m <sup>2</sup> (15.39 sq ft)
Weight	26 kg (57.3 lbs)
Cables	2.5 mm <sup>2</sup> /Length 200 mm (7.87 in)
Connectors	LC-3 (MC3 compatible), IP 68 (NEMA 6P)
Module Mounting	Mounting device fiX on back side of module
Maximum Load (IEC 61646)	5,400 Pa

#### Packaging Details

Type	Outer packaging of corrugated cardboard on wooden pallet (IPPC)
Packaging Unit	22 modules
Dimensions (W x H x D)	1,200 mm x 800 mm x 1,500 mm (42.24 in x 31.49 in x 59.05 in)
Weight	600 kg (1,322 lbs)
Accessories (inclusive)	44 spacers and 22 cable clips

