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X SERIES

MICROMORPH

Electrical Data at STC *			X 105	X 110	X 115	X 120	X 125	X 130
Maximum Electrical Output (+/-3 %)	P_{max}	[W _p]	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}	αP_{max}	[%/K]	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25
Temperature Coefficient of U_{oc}	αU_{oc}	[%/K]	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30
Temperature Coefficient of I_{sc}	αI_{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/m² 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/m² and a wind velocity of 1 m/s

Electrical Data at 200 W/m ² ***			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.



XSERIES
MICROMORPH

General Data

Module Type/Cells	Micromorph (a-Si/ μ 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 ² (15.39 sq ft)
Weight	26 kg (57.3 lbs)
Cables	2.5 mm ² /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

Stand 05/2009 No. 0008

