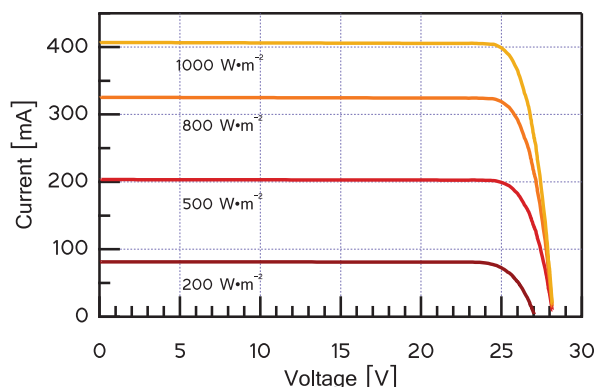


Alta Devices enables high-output mobile power flexible military charging mats

- Flexible cells are robust and rugged, capable of surviving both harsh environments and tough handling
- Flexibility in electrical design supports existing military power demands including BB-2590 charging
- World-record cell (28.8%) and module (24.1%) efficiencies
- Low temperature coefficients and high sensitivity to low light generate unsurpassed real world performance

Electrical Performance of 10W Charger



Performance at STC

		10W	20W
P_{mp}	[W]	10.0	20.0
V_{mp}	[V]	25.0	12.5
I_{mp}	[A]	0.4	1.8
V_{oc}	[V]	28	14
I_{sc}	[A]	0.4	1.8

Standard test conditions [STC]: AM1.5 1000 $W \cdot m^{-2}$ and 25 °C

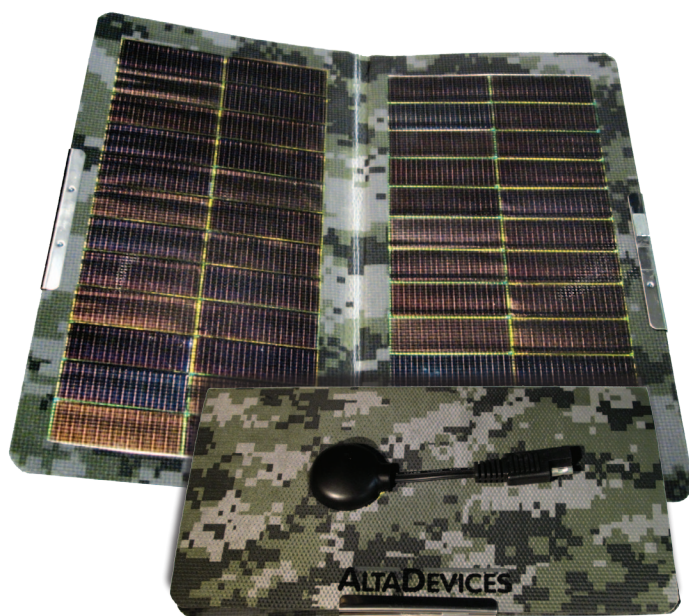
The 10W mat can produce up to 60 Wh/day in strong solar climates. A typical dismantled solder can be fully self powered from 20-30W mat.

Temperature Coefficients

Voltage	[%/ °C]	-0.187
Current	[%/ °C]	+0.084
Power	[%/ °C]	-0.095

Reliability Testing

- Temperature tested from -75 to +90C
- Exposure to high heat, high humidity environments
- Harsh handling tests
- Compliant to MIL-810-G specifications for temperature, humidity, shock and other environmental stresses



10W Charger

Layout and Design

		10W	20W
Size (open)	[in]	10 x 11	10 x 23
Size (closed)	[in]	10 x 5.5	10 x 8
Thickness (laminate)	[in]	.01	.01
Thickness (total)	[in]	0.6	.6
Weight	[oz]	4	8
Connector		SAE	SAE

Product Options

Size & Power	10 or 20W
Pattern and Color	Multicam, UCP, custom
Connector	SAE, USB, custom

Low Light / High Temperature Performance

