

Streamline Design

With all components encased in a single enclosure. Equinox MX PV inverters are easy to install, operate and maintain.

Advanced Utility-Ready Features

- Remote control of real and reactive power
- Low-voltage ride through
- Simplified grid interconnection
- Fast communication
- Easily integrated into SCADA systems through standardized communication interfaces

Rugged Design

- Wide thermal operating range:
-22°F to +140°F (-30°C to +60°C)
- Full nominal power at ambient temperatures up to 50°C.
- Support for external temperatures as low as -40°F with optional Winter climate package
- Designed for optimal performance in Dessert, Topical and Winter climates

Industrial-Grade Engineering

- Fully outdoor rated solution (no concrete station required)
- Type 3R enclosure for maximum protection and longevity
- Double wall enclosure eliminates external air circulation from inside inverter
- Solar shields attached to exterior of enclosure dissipate solar radiation, reduce heat buildup



Profitable PV Power

The Satcon® Equinox™ MX inverter has a significant impact on the profitability dynamic of large-scale solar power systems. With its system intelligence, next-generation multi-MPPT technology, and industrial-grade engineering, the Equinox MX inverter maximizes system uptime and power production, even in the harshest environments.

Rugged Design

Equinox MX features a Type 3R enclosure, ensuring protection and longevity. It features a wide thermal operating range from -22° F to +140° F. With the optional Winter climate package, it supports temperatures as low as -40° F with an optional heater.

Industrial-Grade Engineering

As a fully outdoor rated solution, Equinox MX does not require an external climate controlled enclosure or concrete station, reducing both cost and space requirements. Equinox MX's double wall enclosure cooling system eliminates the need for external air circulation inside the inverter, reducing contaminants and improving cooling performance.

Increased PV Plant Yield

Equinox MX, Satcon's next-generation inverter design, features best-in-class peak efficiency of 98.7% to provide you with the highest levels of system performance and uptime.

Advanced Utility-Ready Features

Equinox MX's advanced utility-ready features enable remote control of real and reactive power, low-voltage ride through and power factor control. Equinox MX provides for simplified grid interconnection and supports fast communications, allowing it to be easily integrated into SCADA systems through standardized communication interfaces.

Commercial and Utility-Scale

Many of the world's largest solar power installations depend on Satcon Equinox PV inverters to provide efficient and stable power—even in the harshest climates.

Proven Performance

The proven leader in solar inverter solutions for commercial installations, Satcon sets the standards for efficient large-scale power conversion



Equinox MX 500kW

Outdoor Construction

- Rugged cabinet for all environments
- Dual cooling fans

Easy Maintenance

- Modular components make service efficient
- Convenient access to all components
- Customizable large in-floor cable gland plates make installation of DC and AC cables easy
- Integrated DC two-pole disconnect switch isolates the inverter, with the exception of the GFDI (Ground Fault Detection and Interruption) circuit if available, from the photovoltaic power system to allow inspection and maintenance

Proven Reliability

Rugged and reliable, Equinox MX PV inverters are engineered from the ground up to meet the demands of large-scale installations.

Specifications	500 kW
Input Parameters	
Input Voltage Range	500-850 VDC
Maximum Array Input Voltage	1000 VDC
Maximum Operating Input Current ¹	2 x 567 ADC
Number of independent MPP inputs	2
DC Input Combiner	
Combiner Bus Bar Input	10
Number of Inputs and Fuses	10 x 200A
Transformer	
Integrated Transformer	No
Efficiency	
Maximum ²	98.7%
European Efficiency	98.5%
Output Parameters	
Nominal Power	500 kW
Nominal Output Voltage	320 VAC
Output Voltage Range	282-352 VAC
Nominal Output Current / Phase	902 A
Maximum Output Current / Phase	992 A
Standby Consumption	<100 W
Nominal Output Frequency, 3-Phase	60 Hz
Maximum Harmonic Distortion, Full Load	< 3% THD
Power Factor, Full Load	> 0.99
Dynamic Power Factor Control	+/- 0.8
Power Curtailment	0-100%, 1% step



Satcon[®]
Utility-Ready Solar Inverters

Equinox MX 500kW

Specifications	500 kW
Environment	
Operating Temp Range ³	-30°C ~ +60°C
Storage Temperature Range	-30°C ~ +70°C
Cooling	Forced Air
Noise Level (Distance of 3m)	< 65 dB(A)
Relative Humidity (Non-Condensing)	Up to 95%
Elevation (Maximum) ⁴	4,000 m
Enclosure	
Dimensions (H x W x D)	2120mm x 2260mm x 940mm
Weight ⁵	1430 kg
Body Finish	RAL 7035
Hood and Base Trim Finish	RAL 5001
Protection Rating	Type 3R (Outdoor Rating)
Warranty and Services	
Five Year Warranty	Standard
Extended Warranty	Optional
Preventive Maintenance Agreement	Optional
Communication Interface	
Modbus RS485	Standard
Modbus TCP/IP	Optional
Monitoring	
PV Zone	Optional
Third Party Compatibility	Standard
Regulations and Standards Conformity	
UL1741, CSA C22.2 No 107.1-01, IEEE1547, IEEE1547.1	Standard
IEEE C62.41.2, IEEE C62.45	Standard
IEEE C37.90.1, IEEE C37.90.2	Standard
FCC Part 15 Class A	Standard

1. Calculated at nominal power and minimum DC voltage
2. Calculated without auxiliary power
3. Full nominal power in continuous operation at ambient temperature up to 50°C.
4. Operation above 3,281ft.(1,000m) results in a decrease in the maximum ambient temperature for full power operation. For each additional 3,281ft (1,000m) in elevation, there is approximately a +4.5°F (+2.5°C) decrease in the maximum ambient temperature for full power operation.
5. Dependent on the options selected.

Note: All specifications are subject to change.

Warranty & Services

- Training programs
- Support services
- Extended warranty
- Preventive maintenance plans

Contact Information:

E: sales@satcon.com

Web-site:

www.Satcon.com



Satcon®
Utility-Ready Solar Inverters