AE 100TX COMMERCIAL INVERTERS

The industry standard for reliability and ease of installation

AE 100TX commercial inverters set the industry standard for high reliability, ease of installation, and lifetime maintainability. Designed for a 20+ year operating life, their busbar power connections, redundant cooling system, and card cage circuit board design result in remarkable reliability, and a track record of 99+% uptime. With a best-in-class efficiency of 96%, the highly integrated system is designed to save installers time and money with load break rated AC and DC service disconnects, neutral-free installation, oversized busbar landings, and generous cable bending area with bottom and side entry options. The wide 295 to 595 V operating window maximizes energy harvest and provides exceptional stringing flexibility. The robust construction of the AE 100TX inverters makes them ideal for high DC loading applications, with DC:AC load ratios up to 1.75:1 (see specification table for details).

New features include remote disable inputs and an expanded array of monitored sub-combiner fusing options. A 24 V auxiliary power supply, revenue grade meter, and performance monitoring gateway can also be added for a completely integrated inverter solution. Advanced power controls provide essential utility support functions including power factor, curtailment, and controlled ramp rate.

AE 100TX inverters are backed with an industry-leading 10-year nationwide warranty and a comprehensive optional 20-year warranty; plus the best service and support team in the business.

Superior Reliability

- Engineered power connections eliminate failure points
- Increased availability with > 99% monitored fleet availability
- Card cage circuit board design
- Redundant cooling system with Smart Air Management™
- Redundant industrial-grade power supply

Exceptional Installability

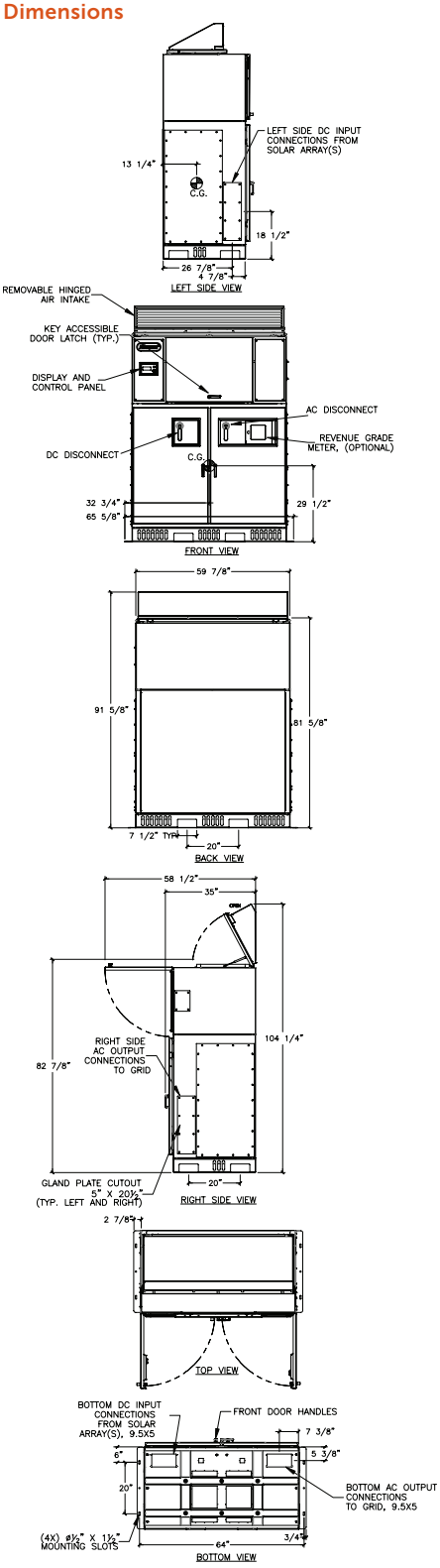
- Bottom and side cable entry
- Generous cable bending area
- Complete range of fused DC subcombiner options
- Exterior mounting flange for fast and easy anchoring
- Error-free AC auto-phasing

Easy to Maintain

- All maintenance and service via front and side access
- Fast change circuit board system shortens service time
- Load break rated AC and DC service disconnects
- Dedicated performance monitoring section

ONTARIO FEED IN TARIFF
DOMESTIC CONTENT COMPLIANT

Dimensions



Summary Specifications*

Mechanical	
Weight	3000 lb
Construction	Powder coated steel, optional stainless steel
Environmental Rating	NEMA 4
Mounting	Pad mount
Isolation Transformer	Integrated
Integrated AC/DC Disconnect	Included
AC and DC Surge Protection	Included
Electrical	
DC Inputs	
Array Configuration	Positive or negative ground
Maximum Operating Input Current	356 A
Maximum DC:AC Load Ratio**	1.75
DC Short Circuit Current Rating**	675 A
Maximum DC Input Voltage (VOC)**	600 V
MPPT Voltage Range	295 to 595 V
Open-Circuit Turn-On Voltage	330 V
AC Output	
Continuous Output Power (kW)	100 kW
Nominal Voltage	208 Y, 480 Y, 600 Y
Operating Voltage Range	-12% / +10%
Electrical Service Compatibility	3 phase, 4 wire, grounded Wye
Maximum Continuous Current	208: 278 A
	480: 120 A
	600: 96 A
Short Circuit Fault Current	208: 320 A_{RMS} at 208 VAC, 60.3 ms
	480: 139 A_{RMS} at 480 VAC, 60.3 ms
	600: 111 A_{RMS} at 600 VAC, 60.3 ms
Nominal Frequency	60 Hz
Frequency Range	59.3 to 60.5 Hz, adjustable to 57.0 Hz
Total Harmonic Distortion	< 3% THD
Efficiency	
Efficiency: Peak/CEC	208: 96.4% / 95.5%
	480: 97.1% / 96.0%
	600: 96.4% / 96.0%
Standby Losses	< 42 W
Inverter Controls and Monitoring	
Power Factor	> 0.99, adjustable to 0.9 leading or lagging
Power Curtailment	5 to 100%, 1% increments
Communication Interfaces and Protocols	RS-485, Ethernet, Modbus, TCP/IP
Environmental	
Operating Ambient Temp. Range	-30 to 50°C
Standby/Storage Ambient Temp. Range	-40 to 60°C
Cooling	Forced convection
Relative Humidity	0 to 95%, non-condensing
Elevation	6000'
Noise Emission	< 61 dBA, typical at full load
Regulatory	
Agency Approvals / Regulatory Compliance	UL 1741, IEEE 519, IEEE 929, IEEE 1547,
	CSA 107.1-1, FCC Class A
Inverter Warranty	10 Year

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