



AE 250TX and AE 260TX

The industry standard for reliability, installability and maintainability

The AE 250TX and AE 260TX commercial inverters raise the bar for inverter reliability, ease of installation, and lifetime maintainability, while delivering best-in-class 97.0% CEC efficiency. High reliability is enabled by market-leading features including busbar power connections, a redundant cooling system, card cage circuit board design and wide operating temperature range. The highly integrated inverter saves installers time and money by including load break rated AC & DC service disconnects, neutral-free installation, oversized busbar landings and generous cable bending area with bottom and side cable entry options.

Communication interfaces, remote disable inputs, and optional 24 V auxiliary power supply are housed in a dedicated low power compartment for safe and easy access. Subcombiner (fusing or breakers), a revenue grade meter, and performance monitoring gateway can be factory installed for a completely integrated inverter solution.

The AE 250TX and AE 260TX offer a wide 295-595 V operating window which maximizes energy harvest and provides exceptional stringing flexibility. The robust construction of the AE 250TX and AE 260TX inverters allow them to be applied in high DC loading applications, with DC:AC load ratios up to 1.75:1 (see specification table for details). AE Solar Energy inverters are engineered for high reliability, with more than 99% monitored fleet availability.

The AE 250TX and AE 260TX are backed with an industry-leading, 10-year, nationwide warranty and a comprehensive optional 20-year warranty; plus the most responsive service and support team in the business.



Superior Reliability

- Redundant cooling system with Smart Air Management™
- Increased availability with >99% monitored fleet availability
- Low parts count reduces potential failure points
- Engineered busbar power connections
- Card cage circuit board system minimizes electronic interconnections

Exceptional Installability

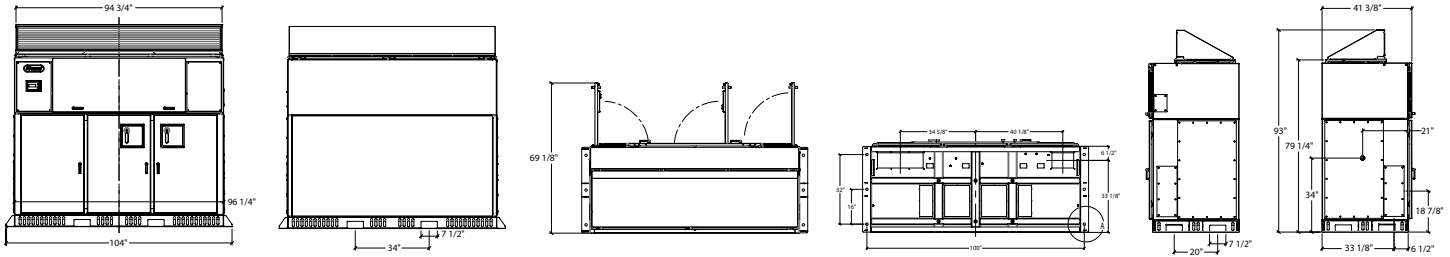
- Bottom and side entry with generous bending area and oversized busbar landings
- Complete range of DC subcombiner options
- Exterior mounting flanges for fast and easy anchoring with no pre-drilling

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



Dimensions - AE 250TX and AE 260TX



AE 250TX and AE 260TX Summary Specifications*

| Mechanical | AE 250TX | AE 260TX |
|--|--|--|
| Weight | 5000 lbs | 5000 lbs |
| Construction | Powder Coated Steel | Powder Coated Steel, Optional Stainless Steel |
| Environmental Rating | NEMA 4 | NEMA 4 |
| Mounting | Pad Mount | Pad Mount |
| Isolation Transformer | Integrated | Integrated |
| Integrated AC/DC Disconnect | included | Included |
| AC and DC Surge Protection | Included | Included |
| Electrical | | |
| DC Inputs | | |
| Array Configuration | Negative ground | Negative ground |
| Maximum Operating Input Current | 890 A | 925 A |
| Maximum DC:AC Load Ratio** | 1.75 | 1.75 |
| DC Short Circuit Current Rating** | 1600 A | 1600 A |
| Maximum DC Input Voltage (VOC)** | 600 V | 600 V |
| MPPT Voltage Range | 295-595 V | 295-595 V |
| Open-Circuit Turn-On Voltage | 330 V | 330 V |
| AC Output | | |
| Continuous Output Power | 249.5 kW | 260 kW |
| Nominal Voltage | 480 Y, 600 Y | 480 Y |
| Operating Voltage Range | -12% / +10% | -12% / +10% |
| Electrical Service Compatibility | 3 phase, 4 wire, grounded Wye | 3 phase, 4 wire, grounded Wye |
| Maximum Continuous Current | 480: 304 A 600: 243 A | 316 A |
| Short Circuit Fault Current | 480: 336 Arms @ 480 VAC, 60.3 ms 600: 269 Arms @ 600 VAC, 60.3 ms | 336 Arms @ 480 VAC, 60.3 ms |
| Nominal Frequency | 60 Hz | 60 Hz |
| Frequency Range | 59.3 - 60.5 Hz, adjustable to 57.0 Hz | 59.3 - 60.5 Hz, adjustable to 57.0 Hz |
| Total Harmonic Distortion | < 3% THD | < 3% THD |
| Efficiency | | |
| Efficiency: Peak/CEC | 480: 97.7% / 96.5% 600: 97.7% / 96.5% | 97.7% / 97.0% |
| Standby Losses | < 33 W | < 33 W |
| Inverter Controls and Monitoring | | |
| Power Factor | > 0.99, adjustable to 0.9 leading or lagging | > 0.99, adjustable to 0.9 leading or lagging |
| Communication Interfaces and Protocols | RS-485, Ethernet, Modbus, TCP/IP | RS-485, Ethernet, Modbus, TCP/IP |
| Environmental | | |
| Operating Ambient Temp. Range | -30 °C to 50 °C | -30 °C to 50 °C |
| Standby/Storage Ambient Temp. Range | -40 °C to 60 °C | -40 °C to 60 °C |
| Cooling | Forced Convection | Forced Convection |
| Relative Humidity | 0 to 95%, non-condensing | 0 to 95%, non-condensing |
| Elevation | 6000 ft | 6000 ft |
| Noise Emission | < 65 dBA, typical at full load | < 65 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 | UL 1741, IEEE 519, IEEE 929, IEEE 1547, CSA 107.1-1, FCC Class A |
| Inverter Warranty | 10 Year | 10 Year |

Subject to change without notice. Refer to user manual for detailed specification.

*Note: Not all performance window specifications can be achieved simultaneously. Performance varies per site. Consult your AE sales or service representatives for specific PV system design questions at sales.support@aei.com.

**Note: In high DC loading applications, none of the listed specifications can be exceeded. See related Application Note for details.

Advanced Power Controls

- Power Factor
- Curtailment
- Controlled ramp rate
- Remote enable/disable

Options

- Integrated fused sub-array combiner with options from 4 to 16 fuses and 70 to 400 Amps
- Fused subcombiners with monitoring: 8 x 200 A, 16 x 100 A
- Integrated breaker sub-array combiner with options for 6 to 9 breakers and 80 to 400 Amps, with optional monitoring
- Integrated revenue grade meter
- Integrated data monitoring solutions
- 24 V auxiliary power supply
- 20-year extended warranty

Performance Monitoring

Increase uptime and reduce maintenance costs with integrated performance monitoring hardware that enables connectivity to a variety of software solutions from industry leading monitoring partners. The tight integration between AE Solar Energy and our monitoring partners creates a superior service and support experience while seamlessly delivering meaningful data. Factory integration and testing of our UL listed monitoring solution ensures high reliability and significantly reduces field installation costs.



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 ENG-AE250-260TX-250-08 09/13