

HDT 30 kW AMEPDIS

Advanced Mobile Electric Power Distribution System



HDT Global's 30 kW Advanced Mobile Electric Power Distribution System (AMEPDIS) is a digitally controlled, highly ruggedized power distribution unit. Designed for the USMC, it is interoperable with currently fielded MEPDISR-R power distribution systems to work as part of a larger electrical grid. The 30 kW AMEPDIS unit is a 120/208VAC, 60 Hz, 3-phase system that accepts multiple AC electrical inputs from larger power distribution units (PDUs), as well as single or paralleled power generation sources.

Through the digital interface, AMEPDIS displays operational parameters, such as voltage, frequency, current, and power for each input, output, and for the overall system. All warnings and faults are annunciated via text and by flashing the display backlight. All advanced features such as circuit breaker trip curves, current limits, and the enabling/disabling of load shedding and phase balancing are accessed via the control panel. To reduce setup time, the unit can be operated in manual mode while being configured. When configuration is complete, the operator can enable these features without shutting down the unit, allowing for seamless transfer from manual to advanced operation.

The output breakers are operated by the control system and can be turned on and off. Trip curves and current limits of each output can be individually adjusted via the control panel. System safety is built in to prevent users from accidentally exceeding hardware limitations. In the event of a control system failure, the circuit breakers will still trip according to the connector rating.

The load shedding and prioritization feature will ensure the most critical loads, as determined by the user, remain powered in the event that overall load demand exceeds power generation capacity and will automatically reconnect them as the power becomes available.

Phase balancing is handled automatically by the 30 kW AMEPDIS unit. The three single phase outputs are shifted accordingly to minimize or eliminate imbalance. Phase balancing helps to prevent the input breakers from tripping due to a single phase being overloaded and increases fuel savings by running attached generators efficiently.

KEY FEATURES

- Fully sealed heavy-duty HDPE and aluminum enclosure
- Designed to meet MIL-STD-810F
 - High and low temperature shock
 - Solar radiation
 - Rain, salt, fog, sand, dust, icing, and freezing rain
 - Road mission
 - Drop test
- LED signaling input and output indicators
- Digital Human Machine Interface displays individual voltage, frequency, and current parameters
- Fully adjustable current limits/trip curves for individual outputs
- Automatic load prioritization and shedding
- Phase balancing on 3 single-phase outputs
- Stackable enclosures reduce packing cube
- Elevated base provides 8" (20.3 cm) of ground clearance to connection points

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30 kW AMEPDIS SPECIFICATIONS

Ordering information

HDT part number	963-01-01
NSN	N/A
On GSA Contract	N/A

Input

Voltage	120/208VAC, 3-phase
Frequency	60 Hz

Input connections

Number	Type
2	100 Amp, 4 Pole, 5 Wire 120/208Y VAC, IEC 60309 Pin and Sleeve inlet

Input overcurrent protection

Number	Type
2	100 Amp, 3 Pole, branch-rated main circuit breakers

Output

Voltage	120/208Y VAC 120 3-phase, VAC single phase
Frequency	60 Hz
Current	200 Amps

Output connections

Number	Type
4	60 Amp, 3 Phase, 4 Pole, 5 Wire, 120VAC, IEC 60309 Pin and Sleeve receptacles
2	30 Amp, 3 Phase, 4 Pole, 5 Wire, 120VAC, IEC 60309 Pin and Sleeve receptacles
2	20 Amp, 1 Phase, 2 Pole, 3 Wire, 120VAC, Pin and Sleeve receptacles
2	20 Amp, 1 Phase, 2 Pole, 3 Wire, 120VAC, IEC 60309 Pin and Sleeve receptacles
1	NEMA 5-20, 20 Amp, 1 Phase, 2 Pole, 3 Wire, 120VAC, GFCI duplex receptacle

Output overcurrent protection

Number	Type
4	60 Amp, 3 Pole, adjustable-trip branch-rated circuit breakers
2	30 Amp, 3 Pole, adjustable-trip branch-rated circuit breakers
2	20 Amp, 3 Pole, adjustable-trip branch-rated circuit breakers
3	20 Amp, 3 Pole, adjustable-trip branch-rated circuit breakers

Environmental

Operating temps	-40°F to 135°F 40°C to 57°C
Cooling method	Convection
IP rating	IP-65
Other environmental	Designed to meet MIL-STD-810F

Physical characteristics

L x W x H	36.0" x 25.0" x 24" 91.4 x 63.5 x 61 cm
Weight	171 lbs 77.6 kg

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