

Next Generation Degaussing Amplifier

Benefits

- Innovative and enhanced next generation amplifier architecture
- Reduced lifetime cost of ownership in intended applications
- Rugged and proven design allows for faster time to market
- Efficient performance with forced-air cooling
- Local circuit protection, control and monitoring
- Thermally protected and monitored operation
- MIL-STD-1399 Section 300B and STANAG 1009 ed. 8 compliance

Ultra Electronics EMS offers a compact 12kW bipolar Next Generation Degaussing Amplifier (NGDA) intended to meet stringent US Mil-Spec and Defense Standards for naval applications. Designed for reliability and efficiency, this amplifier performs within the most extreme environments encountered on board naval vessels. The NGDG amplifier is capable of providing isolated and regulated bipolar DC current with exceptionally low ripple and enhanced accuracy. The amplifier performs as a standalone programmable current source, or as part of a larger Advanced Degaussing (ADG) system continuously driving purely resistive, reactive or mixed loads up to the full rated power while maintaining precise and stable system operation.

Ultra Electronics EMS is the premier supplier of underwater electromagnetic (UWEM) signature products meeting and exceeding standards, requirements and specifications for the US Navy, UK Royal Navy, NATO, Republic of Korea Navy and other international bodies. This experience, combined with FEMAP design and analysis,

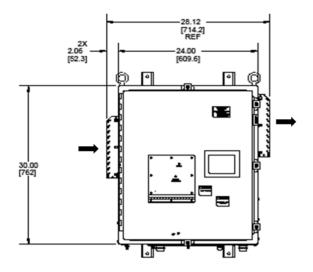
enables EMS to offer UWEM signature management services that are tailored, both in cost and time, to the various phases of design, development and construction of ships and submarines.

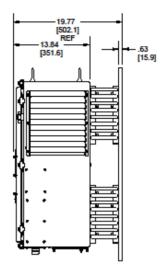
Features:

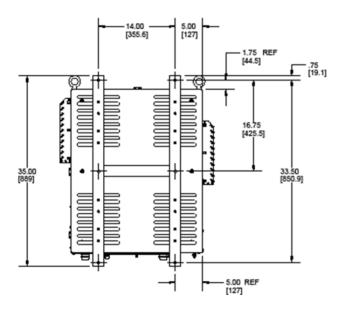
- 12kW continuous power (300VDC@40ADC or 400VDC@30ADC) available in standard enclosure
- Embedded microprocessor-based control
- IGBT based inverter with advanced gate drive control technology
- Remote current programing and monitoring over serial communications (Ethernet, RS-422/485, PROFIBUS)
- Controlled current ramp times (di/dt)
- Local current programing and monitoring using local controls and OLED display



Mechanical Dimensions:







General Specification:

Input:	440V,3PH, 60Hz (ungrounded)	
	MIL-STD-1399 Section 300B	
	STANAG 1008 Edition 8	
Output:	300VDC, 40ADC or 400VDC, 30ADC	
Rating:	12kW Continuous @50C	
	110% overload	
Isolation:	2.5kVrms Input to Output	
	2.5kVrms Input to Ground	
	2.5kVrms Output to Ground	
Efficiency:	> 90% at rated power	
Environment:	Temp:	0°C to 50°C
	Humidity:	0 to 95%, non cond.
	Vibration:	MIL-STD-167-1
	Shock:	MIL-S-901 D
	EMI	MIL-STD-461F
Physical:	Length:	30.0" (762.00mm)
	Width:	24.0" (609.60mm)
	Height:	13.2" (334.26mm)
	Weight:	378lb (172kg) with
	-	isolation mounts
	Enclosure:	Drip proof to 45°
	Cooling:	Forced-air
		(with redundancy)



Ultra Electronics

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