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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Data Sheet

DM-II PlusPower Quality Recorder

Amprobe's DM-II PLUS is a full-featured three phase power quality recorder to maintain, diagnose and troubleshoot electrical systems. It measures and records a broad spectrum of power quality parameters. Easy to use, it's capable of measuring and recording voltage, current, voltage anomalies (sags or surges), harmonics, energy and power (active, reactive and apparent), power factor (true and displacement), and frequency. This unique product comes as a complete kit with current transducers and an increased memory size for data storage, larger display size, and real-time downloading using Amprobe's unique Download Suite software.

No hassle warranty

No waiting.

No shipping charges.

Our commitment to high-quality products and customer service is demonstrated by our industry exclusive "No Hassle" warranty. In the unlikely event that an Amprobe Test Tool requires warranty service, any of our local dealers are authorized to replace it, on the spot.

(note: \$500 MSLP limit)

- AC Current up to 1000A, AC Voltage, Active, Reactive and Apparent Power, Energy, Peak Demand & Power Factor
- All readings are True RMS
- 5 built-in selectable languages: English, French, Italian, German and Spanish
- User selectable rates allow recording from one hour to several months
- Works with single & three phase systems (Y & delta)
- Readings and charts can be viewed on the DM-II LCD screen or downloaded to a PC
- Capable of recording all parameters (single or three phase) simultaneously
- Optional transducers available for 100A and 3000A (flexible) current capability.





DM-II Plus Power Quality Recorder

Data Sheet

General Specifications

Mechanical Features	
Dimensions:	444.5(L) x 273.05(La) x 190.5(H) mm
	17.50"(L) x 10.75" (La) x 7.50"(H)
Weight:	11.5 Lb (5.2kg)
Internal power supply:	6 batteries 1.5V D size NEDA 13A, IEC L20R
Battery Life:	22 hours
External power supply	Use only Amprobe power supply Adapter code DMT-EXTPS.
Display:	dot matrix with backlight
resolution	128 x 128 dots (16384 dots)
dot size	0.5mm x 0.5mm
visible area	73mm x 73mm (2.9" x 2.9")
No. of samples per period	128
Clamp:	
Opening:	53 mm (2.15")
Maximum diameter of the cable:	50 mm (2.00")
Reference temperature:	23°C ± 1°C (73°F ± 2°F)
Operating temperature:	0°C to 50 °C (32°F to 122°F)
Relative humidity:	<70%
Storage temperature:	-10°C to 60 °C (14°F to 140°F)
Storage humidity:	<80%
Location:	Indoor operation, < 2000 m
EMC/EMI/ESD	EN61326-1:2006
Safety	
The instrument complies to the standard	
Insulation:	Class 2 / Pollution Degree 2
Over-voltage category:	CAT III 370V~ (Phase-Earth)
	CAT III 635V~ (Phase-Phase)
Clamps:	IEC 61010-2-032 Ed. 2.0
Phase Sequence Detection:	EN 61557-7:2003

Specifications Accuracy 73°F± 2°F (23°C ± 1°C) with relative humidity < 75%

Voltage measurement (Autoranging)

Range	Accuracy		Resolution	Input impedance
15-370V	±(0.5% + 2 dig	it)	0.2V	300 k Ω (phase-neutral)
310-635V	±(0.5% + 2 dig	it)	0.4V	600 k Ω (phase-phase)
Voltage Anomalies	Detection (Manual Selection	on of Range)		
Voltage				
Range	Accuracy		Resolution	Input impedance
15-370V	±(0.5% + 2 dig	it)	0.2V	300 k Ω (phase-neutral)
30-635V	±(0.5% + 2 digit)		0.4V	600kΩ (phase-phase)
Current measureme	ent (DM-II Plus only)			
Range	Accuracy	Resolution	Input impedance	Protection against overloads
0.005-0.26V	±(0.5%+2digit)	0.0001V	100kΩ 5V	0.26-1V 0.0004V
Current measureme	ent (Using DM-CT-HTA)			
Range	Accuracy	Resolution	Protection against overloads	
5 to 1000 A	±(1.5% of range)	0.1 A	600 V	
Minimal Current meas	surable is equal to 1.5% of Cla	amp Full Scale		



DM-II Plus Power Quality Recorder

Current measurement (Using AM-FLEX 33)

Data Sheet

Specifications, cont.

Range	Accuracy	Resolution	Protection again	st overloads	
15 to 3000 A	±(1.5% of range)	0.1 A	600 V		
Minimal Current measu	urable is equal to 1.5% of Cla	mp Full Scale			
Power measurement	(cos : 0.5c[positive] – 0.5i	[negative])			
Value	Ranges		Accuracy	Resolution	
Active power	0 – 999.9W		±(1.5% + 2 digit)	0.1W	

Value	Ranges	Accuracy	Resolution
Active power	0 – 999.9W	±(1.5% + 2 digit)	0.1W
	1kW – 999.9kW	±(1.5% + 2 digit)	0.1kW
	1MW – 999.9MW	±(1.5% + 2 digit)	0.1MW
Reactive power	0 – 999.9VAR	±(1.5% + 2 digit)	0.1VAR
	1kVAR – 999.9kVAR	±(1.5% + 2 digit)	0.1kVAR
	1MVAR – 999.9MVAR	±(1.5% + 2 digit)	0.1MVAR
Apparent power	0 – 999.9VA	±(1.5% + 2 digit)	0.1VA
	1kVA – 999.9kVA	±(1.5% + 2 digit)	0.1kVA
	1MVA – 999.9MVA	±(1.5% + 2 digit)	0.1MVA
Active energy	0 – 999.9Wh	±(1.5% + 2 digit)	0.1Wh
	1kWh – 999.9kWh	±(1.5% + 2 digit)	0.1kWh
	1MWh – 999.9MWh	±(1.5% + 2 digit)	0.1MWh
Reactive energy	0 – 999.9VARh	±(1.5% + 2 digit)	0.1VARh
	1kVARh – 999.9kVARh	±(1.5% + 2 digit)	0.1kVARh
	1MVARh – 999.9MVARh	±(1.5% + 2 digit)	0.1MVARh
os φ measurement			

Cos ϕ measurement			
$\cos \phi$	Resolution	Accuracy (expressed in degrees)	
0 to 0.20	0.01	0.6	
0.21 to 0.50	0.01	0.7	
0.51 to 0.80	0.01	1	

Measurement of Harmonics

voitage			
Range	Accuracy	Resolution	
DC – 25h	±(5.0% + 2 digit)	0.1V	
26h – 33h	±(10.0% + 2 digit)	0.1V	
34h – 49h	±(15.0% + 2 digit)	0.1V	
The voltage harmonics	will be null under the following threshold:		

- The voltage narmonics will be hull under the following threshold
- DC: if <1V or <2% of 1st harmonic
- 1st harmonic: if <2V
- 2nd to 49th: if <1V or <2% 1st harmonic

Cu	rre	nt

Range	Accuracy	Resolution	
DC – 25h	±(5.0% + 2 digit)	0.1A	
26h – 33h	±(10.0% + 2 digit)	0.1A	
34h – 49h	±(15.0% + 2 digit)	0.1A	

- The current harmonics will be null under the following threshold:
- DC: if <2% of 1st harmonic or < 0,2% of clamp full scale
- 1st harmonic: if < 0.2% of clamp full scale
- 2nd to 49th: if < 2% 1st harmonic or < 0.2% of clamp full scale

Setting the FLEX option the DC component will be ignored.

Frequency Measurement

Instrument set to 50Hz

instrument set to 50Hz			
Range	Resolution	Accuracy	
47 to 53	0.1Hz	±(1.0% + 1 digit)	
Instrument set to 60Hz			
Range	Resolution	Accuracy	
57 to 63.6	0.1Hz	±(1.0% + 1 digit)	



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Data Sheet

Included Accessories

DMT-EXTPS External power supply 12VDC
DM-CT-HT (code 1 pcs) 3 clamp meters 1000A/1V
KITENERGY3 4 cables and alligators for voltage measurement

Download Suite 2.2 1 Amprobe Custom Software CD

C232NG1 Serial Cable

Optional Accessories

AM-FLEX33 Flexible current transducer, 3000 A

DM-CT-100 Current transducer, 100A



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