ADTEK PRODUCTS RELATED TO ENERGY AND POWER MANAGEMENT





VAW MULTIFUNCTION DC POWER METER

Used for measuring DC electrical parameters in solar and wind energy system, and testing the energy consumption of portable electronic devices. Provide multiple IO functions including 4 Relay Outputs (available with a Pulse Output), 2 Digital Inputs and an Analog Output. Reliable Modbus RTU protocol communication is also available via an RS485 serial port for acquiring all measured

MWH-8W WALL-MOUNTING DIGITAL ENERGY METER

Measure a wide range of parameters such as V, A, Hz, PF, P, Q, S KWH, KVARH, VKAH et al. Built-in circuit breaker can switch off the power in case any penalty of exceeding the contract capacity . Pulse output and Modbus RS485 output functions make it easier for testing or constracting a centralized automatic electric meter reading system. Optional lead seal can prevent any dispute.

Applications

- **1. Solar and Wind Energy Systems**
- 2. DC Energy Management Systems 3. Industrial DC Control Systems
- 4. UPS Systems Monitoring
- 5. Power Consumption Testing of Portable Electronic Devices

Applications

- 1. Rental Building Electricity Charging Management
- 2. Booth Electricity Charging
- Management 3. Market/Vender/Stand Electricity **Charging Management**
- 4. Rental Apartment Electricity Charging Management 5. Distributed Generation Electricity
- **Charging Management**
- 6. Dormitory Electricity Charging Management

Applications

Management

Management

Applications

1. Home Appliance Energy

7. Trailer Coach Electricity Charging Management

Consumption Analyzing Management

2. Home Appliance Electricity Charging

3. Home Appliance Energy Saving

AEM-PS HOME APPLIANCE ELECTRICITY MANAGEMENT SOCKET

One of the most significant part of energy saving. Evoke users to save energy spontaneously by means of displaying the energy usage directly on the device. Integrate digital energy measurement with the technique of electricity management socket. This easy-to-use plug-in device automatically calculates energy costs and carbon footprint to help users conserve energy and avoid energy wastage.

CPT MULTIFUNCTION POWER TRANDCUER

Provide a selection of single phase or three phase configurable input and multiple IO functions including 2 Pulse Outputs, 4 Analogue Outputs for signal conversion, and a Relay Output for remote controlling and alarming. Parameters are configurable by ADPro software via RS485 serial communication port utilizing MODBUS RTU protocol. With LCD display and push button on the front, CPT offers an easy way of setting and adjustment. Class 0.2%(V/A/VAR/W-Hr/Var-Hr)

1. Power Plant/ Substation Automatic

- **Control System** 2. Power Distribution Motor Control Monitoring
- 3. Energy Consumption Monitoring and Control for Mechanical Equipment
- 4. Automatic Energy Management System for Intelligent Building
- 5. Power Testing Equipment

PA-MTS MULTI-CHANNEL CONVERTER

Provide 8 channels or 16 channels input converting to a Modbus RS485 output. Optional isolation for each channel is available as well. Equip with multiple inputs such as 0~10V, 4~20mA, PT 100 Ω , and Thermocouples. Allow mass signals acquisition, PA-MTS provides an extremely power and cost effective multi-circuit metering and monitoring

Applications

- 1. Accessing Signals for Testing Equipment
- 2. Monitoring and Controlling for Mechanical Equipment
- 3. Accessing Temperature & Humidity Signals from Air Conditioner for **Intelligent Building**
- 4. Battery Life Monitoring



SENSING TRANSDUCERS

Temperature sensor, Temperature transducer, Temp. & Humidity converter, pressure transducer, level sensor, carbon monoxide, carbon dioxide, split core current transformer, photoelectric sensor, proximity switch, encoder, and power supply



CPM-80 SERIES POWER ANALYZER

CPM-80 is a high level power analyzer along with advanced DSP chip, high accuracy measurement, TFT display, networking (via RS485 & Ethernet) and wide spectrum of analysis (2~63th THD & individual harmonic readings). Provide more than 50 types energy measurements and power quality parameters, diverse I/O controlling functionality (DI/DO/RO/AO), and up to 1MB embedded Flash memory for Data-Logging. It is an accurate and easy-to-use power meter in power quality controlling system nowadays.

CPM-70 SERIES MULTIFUNCTION POWER METER

Provide single phase & three-phase high accuracy measurements of V, A, P, Q, S, PF, Hz, KWh, 2~31st individual harmonic readings, and display the total electricity cost and CO2 emission. Equip with 4 DI, 2 Relay Outputs, RS485 for Modbus communication, TOU and 1MB embedded Flash memory for Data-Logging.

Applications

- 1. Power Quality Analysis Monitoring of High/Low Voltage Switchboard
- 2. Plant Automation Monitoring

Applications

- 1. Power monitoring of Motor Control Switchboard
- 2. Distribution Power Monitoring 3. Energy Management and Electricity
- Cost Allocation System 4. Power Quality Analyis



PM-70

CPM-20 SERIES ECONOMIC TYPE MULTIFUNCITON POWER METER

Provide single phase & three phase high accuracy measurements of V, A, P, Q, S, PF, Hz, KWh, power quality analysis (2~31st Total Harmonic Distortion), Demand, DI, DO, and displaying or recording the Max. or Min. parameters. It also provides electricity bill ratio (Cost) and CO2 settings and displays the total electricity cost and CO2 emission.



CPM-10 ECONOMIC TYPE MULTIFUNCTION POWER METER

CPM-10 is a cost-effective multifunction power meter that offers single phase or three phase high accuracy measurements, display Voltage, Ampere & Watt-Hr and RS485 port for Modbus communication. CPM-10 offers a cost effective metering solution for energy management and remote communication.



MWH-10A 10 DIGITS WATT & WATT-HR ENERGY METER

Provide high accuracy measurement of Energy (Watt-Hr), active power, display and remote communication. Optional a relay output for remote controlling and alarming, an analogue output for signal conversion, an RS485 port for Modbus communication and a pulse output provide unparalleled functionality.

AEM-DR MULTI-CIRCUIT POWER METER(W/ PATENT)



Provide high accuracy measurement of single-phase 5 circults or 3-phase 2circults parameters (V. A. P. O. S. PF, Hz, KWh). DIN-rail mounting completely fits indoor switchboard installation of European standard. Multi-circuit design and relay output modular expansion design decrease the overall cost and make the functionality more flexible. All monitored data is available via an RS485 serial or a PLC communication for the needs in energy management, alarming, and remote controlling. Embedded 1MB flash memory for Data-Logging can avoid any data missing once the communication is interrupted.

Applications

- 1. Power Monitoring of Motor Control Switchboard
- 2. Distribution Power Monitoring
- 3. Energy Management and Electricity Cost Allocation System
- 4. Power Consumption Monitoring of **Mechanical Equipment**

Applications

- 1. Power Monitoring of Motor Control Switchboard
- 2. Distribution Power Monitoring
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Applications

- 1. Electricity Charging System 2. Power Consumption Monitoring and Controlling
- 3. Power Distribution System
- 4. Automatic Energy Management System of Intelligent Building
- **5.** Power Testing Equipment

Applications

- 1. Rental Building Electricity Charging Management
- 2. Booth Electricity Charging
- Management 3. Market/Vender/Stand Electricity **Charging Management**
- 4. Rental Apartment Electricity **Charging Management**
- 5. Distributed Generation Electricity **Charging Management**
- 6. Dormitory Electricity Charging Management
- 7. Trailer Coach Electricity Charging Management



APPLICATION of DL1S DATA LOGGER

Combine the usage of DL1S and CPM-70 for recording the parameters. Chronological record the parameters (VAC, AAC, KW, KWH, PH, HZ, ...) and Power quality (1~31st Individual Harmonic, Un-balance, K Factor, Crest Factor,...) in SD card of DL1S from multifunction power meter via a RS485 serial communication port, and providing ADPro software to convert the data into Excel spreadsheets (.xls) for analysis. Along with Split core CT such as US-CTS or US-CTA/ US-CTB for long-term Data-Logging.



APPLICATION of POWER ANALYZER INSTALLED in CONTROL ROOM for POWER CONTROLLING

Utilizing multifunction power meter to measure the power consumption in control room and display parameters of V, A, Hz, P, Q, S, KWH, KVAR and parameters of power quality such as individual harmonic from 2nd to 63rd. All monitored data is available via a RS485 serial communication to PC monitoring and controlling system for data acquisition and analysis in order to improve the power supply system in control room and ensure the equipment operating properly.



MWH-10A MONITORING THE POWER CONSUMPTION of MECHANICAL EQUIPMENT

Utilizing MWH-10A to measure the power consumption and display parameters of KW & KWH for mechanical equipment as well as acquiring and analyzing all measured data via RS485 communication port running the Modbus RTU protocol in order to diminish the power consumption and CO2 emission, conserve energy and save money.

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AEM-DR MULTI-CIRCUIT POWER METER (W/ PATENT)

Provide high accuracy measurement of single-phase 5 circuits or 3-phase 2 circuits parameters (V, A, P, Q, S, PF, Hz, KWh). DIN-rail mounting completely fits indoor switchboard installation of European standard. Multi-circuit design and relay output modular expansion design decrease the overall cost and make the functionality more flexible. All monitored data is available via an RS485 serial or a PLC communication for the needs in energy management, alarming, and remote controlling. Embedded flash memory for Data-Logging can avoid any data missing once the communication is interrupted.



AEM for HOME ELECTRICITY APPLICANTS TESTING

AEM, a plug-in multifunction power meter, is for power consumption testing of manufacturer of Home Appliance Products as well as providing the data acquisition and analysis via Zigbee wireless communication. It integrates digital energy measurement with the technique of electricity management socket. See at a glance how much energy appliances use and what they're costing you, AEM W/LCD Dislpay accurately measure energy consumption of home and office electronics and appliance. This easy-to-use plug-in device automatically calculates energy costs and carbon footprint to help you save money and energy.

DATA ACQUISITION

Provide 8/16 channels multiple inputs converting to RS485 communication for centralized data acquisition of testing equipment, mechanical controlling equipment and cold storage equipment.



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MEASUREING/INPUT			MODEL (PA	AGE of DATASHEET)		
A/B DIVISIONS	POWER SYSTE					
VOLTAGE CURRENT		CSMS-321	CSN-VA	CM1-VA		
	Meters	CS1-VA	CS2-VA	CS3-VA		
		VAM	A6-VA			
	Transducer	CA/CV-12	CA/CV-33	2A/2V	2C	
		MT-VI	NT-VA	AT-VA	ST-VA	
FREQUENCY	Meters	CSN-F CF	CM1-F MT-FD	CS1-F ST-RL	CS2-F	
	Transducer Meters	MW-5A	MWH-10A	MWH-8W	VAW	
WATT		CW/CQ	CWQ	2W/2Q	*/ (**	
VAR	Transducer	CWHW	СОНО	CWH/CQH	CWQH	
Power Factor	Meters	MPF-5A				
Phase Angle	Transducer	CPF/CPA				
Amp-Hr	Meters	CS2-TM				
in the second se	Transducer	MT-DF	CDM 10	CPM-20	CPM-70	MWH-8W
Multifuction Measurement	controller	VAW	CPM-10	multifunction power meter	multifunction power meter	wall-mounting digital
	Transducer	CPT multifunction power tra	ndcuer			energy meter
A/B DIVISIONS	ACCESSORY IN	I POWER SYSTEM	incuci			
		UA-SHT	UA-CTR	UA-CTS		
Current	Accessory	US-CTS	US-CTA	US-CTB		
C/D DIVISIONS	PROCESS CONT		N			
				CM1 DD	тр	тс
Process (0~10V/4~20mA)		CSMS CS1-PR	CSN-PR CS2-PR	CM1-PR CS2-TM	TB CS3-PR	VAM
	Meters	A6-PR	002-FR	002-110	550-i n	VAIVI
		MT-VI	MT-CL	NT-VA	ST-PR	ST-LC
	Converters	AT-PR	SD-PR	SD-CL	PA-MTS	
Temperature (RTD / TC)	Meters	CSMS	CSN-T	CST-321M	CST-321S	
		ТВ	TC	CS1-T	CS2-T	VAM
	Converters	MT-RTD	MT-TC	NT-TR	NT-TC	
		AT-TR	AT-TC	ST-T	PA-MTS	
		SD-T	TT	TTX		
Strain Guage/Load Cell (mV/V)	Meters	CSN-SG CS1-SG	CS2-SG	CS3-SG	A6-SG	A7-SG
	Converters	MT-SG	NT-SG	AT-SG	A0-5G	A7-3G
		ST-SG	ST-LC	Al-30		
Potentio-Meter (Potentiometer-3 wire)		CSN-PM				
	Meters	CS1-PM	CS2-PM	CS3-PM	VAM	
	Converters	MT-RT	NT-PM	AT-PM	ST-PM	ST-LC
Resistance (Resistance-2 wire) AMP-Hr./Totalizar/ Batch/Rate (mA/V; Pulse)	Meters	CSN-RS				
		CS1-RS	CS2-RS	CS3-RS	07.00	07.1.0
	Converters	MT-RT	NT-RS	AT-RS	ST-RS	ST-LC
	Meters	CSN-H CS1-RL	CM1-CT CS2-RL	CS2-TM	CS2-CT	CS2-MC
	Converters	MT-FD	MT-DF	MT-FF	ST-RL	032-1010
		CSN-H	CM1-RL	1911 (1	JINE	
RPM/Linearly Speed (Pulse)	Meters	CS1-RL	CS2-RL	CS2-TM		
	Converters	MT-FD	MT-FF	ST-RL		
Counter/Length	Meters	CM1-CT	CS2-CT	CS2-MC	CS2-TM	
(Pulse)	Converters	MT-FF				
E DIVISIONS	SENSING TRAN	SDUCERS APPLICA	TION			
Sensing	Temperature	ТН	TS	TR	HTS	HTP
Transducers	Humidity	HTS	HTP			
Transducers	Pressure	PS	PU/PD			
	Level Sensor	LS				
	Flow Meter	WS				
	CO2	CO2		1.00		
	Strain Guage	LCA	LCB	LCS	LCW	ED1
	RPM/SPEED Limit/Safety	SP1 PE2	SP2	PE1	PE3	ED1
	DIN-Rail DC Power Supply	CSP-2	CSP-3			
	Power Supply Accessory	CFI	001-0			
F DIVISIONS	RECORD	UT				
Data-logger	Meters	DL1S	ADPro software			
G DIVISIONS	NETWORK CON		ADFIO SOILWale			
NETWORK converter	ETHERNET	PL-SNET	PL-TNET	PL-DNET	PL-ANET	PL-RNET
NETWORK converter	RS232/422/485	PL-STS	PL-STU	PL-DTS	PL-ATS	PL-RTS
		PA-MTS				