

ADTEK

Smart MiT, Easy Link



Power Meter Family Product Overview



AD Company Introduction

Established in 1990 and headquartered in New Taipei, Taiwan, ADTEK is a leading Taiwanese meter manufacturer, owning rich experience nearly up to 30 years.

We provide wide ranges of product lines as a specialist from entry level to high level, to meet every different market requirements in the fields of Power Management and Industrial Automation. With fast-paced research & development and production ability, we offer multiple customization services.

We have rich successful cases and well-known brand awareness in many applications, such as of power facilities, continuous production, infrastructure and commercial building. As the biggest Taiwanese meter exporter, our oversea clients are all over 35 countries.

Looking to the future, ADTEK is your best partner for IIoT and sustainable energy saving solution.

AD Company Evolution

1990

Established on July 30th.



2001

Founded Chang Shuan Technology Co.,Ltd to expand market coverage in China.



2005

Formally complied with European Electrical Standards (CE).

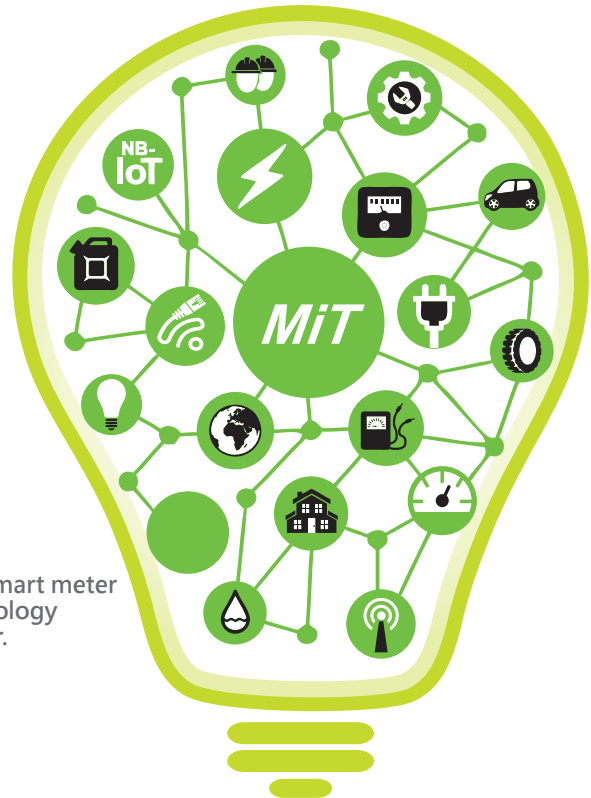


ADTEK Suzhou

China Sales Team
Around 20 people

ADTEK Taiwan Headquarter
New Taipei City

Taiwan Sales Team
Around 20 people



2018

Aiming to be a smart meter intelligent technology solution provider.

2013

Purchased R & D office and expanded headquarter area up to 580 square meter.



2017

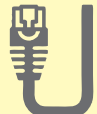

Launched 1st self-developed innovative strategic product: AEM-DRA multi-circuit power meter.



AD Product Overview



Communication Interface

NB-IoT   WiFi

Ethernet



AD-GW ADPower **NEW**
Series Network Converter
(Modbus to Ethernet or WiFi)



AD300-Plus **NEW**
(Built-in WiFi)
IoT-Gateway



Energy management software




AD-SeeS **NEW**
EMS Platform
with software, gateway and meters.




Signal Processing & Display


Power Meter - Panel


- Advanced




CPM-80
Multifunction Power Analyzer
- 


CPM-70
Multifunction Power Analyzer
- Universal




CPM-20
Multifunction Power Meter
- 

CPM-12
Multifunction Power Meter
- 

CPM-10
Economic Multifunction Power Meter
- Economic



CM1/CM3-VA
4 Digitals Voltage/Current Meter
- 

CS1-VA
Digital Voltage/Current Meter

Power Meter - Panel - DC Type

5 Single-Phase
Loops / 1 (Main)
Circuit



AEM-DD
Multi-Loop DC power meter



VAW
Multifunction DC Power Meter

Process Meter - Panel



CM1-PR
Process Meter



CS1/CS2/CS3
Industrial Process Meter
(Spin rate, Temperature, Weight.....)



Signal Measuring & Sensing

Power Meter - Din Rail

8 Three-Phase
Loops + 2 Main
Circuits



AEM-DRA
Multi-circuit Power Meter

5 Single-Phase
Loops / 1 (Main)
Circuit



AEM-DR
Multi-Loop Power Meter

1 Loop for Single
-Phase or Three
Phases



CPM-12D **NEW**
Multifunction Power Meter



ADP-PM-A **NEW**
Multi-circuit Power Meter



Signal Transduce & Convert



CPT
Multifunction Power Transducer



CA / CV
AC Current/ Voltage Transducer



CW / CQ
AC Watt / Var Transducer



AT
Converter/Isolator



MT
Industrial Signal Converter
(Frequency, AC/DC Signal...etc..)



ST
Multifunction Converter



US-CTV
Split Type Current Transformer (Folder snap)



US-CTS
Split Core Current Transformer



UA-SHT
DC Current Shunt



WTM-100
Wireless Temperature Transmitter & Meter



TH
Temperature Sensor



AQW
Wireless Air Quality Sensors



HTO
CO / CO2 / Temperature &
Humidity Transmitter



PS
Pressure Transmitter



UC1 **NEW**
Universal Transmitter



ADPower **NEW**
Remote I/O Module

Panel Mounting

Advanced

CPM-80 Series

Multifunction Power Analyzer



- High and accurate sampling rate: 256 points / cycle
- Energy accuracy: 0.2S (IEC62053-22:2003)
- True RMS Measurement
- Power Quality Event Record (Instantaneous Voltage Sag / Swell Event Time stamp)
- 3.5" TFT LCD color screen and four quadrant display
- Available optional communication protocols (Ethernet)
- High individual harmonic measurement available (~63th)
- With phase angle, power demand, Time of Use (TOU), CO² emissions, electricity cost calculation
- Up to 48 kinds of parameter measurement with data logging for analysis
- 4MB internal flash memory
- Up to 8 digital input, 4 relay output, 2 analog output, 2 pulse output and optional second communication port
- Easy to install with auto-wiring correction function
- FCC, CE, EMC, LVD certification, CMET (as UL) on-going

Application:

- ⊙ For complex power system environment
- ⊙ Factory automation applications
- ⊙ Main panel, distribution panel measurement
- ⊙ Long-hour data logging for power quality analysis

CPM-70 Series

Multifunction Power Analyzer



- Sampling rate: 128 points / cycle
- Energy Accuracy: 0.5S (IEC62053-22:2003)
- With individual harmonic measurement (2~31th)
- With power demand, TOU, CO² emissions
- Provide 34 kinds of parameter measurement, maximum / minimum value recording function
- Up to 4 digital input, 2 relay output, 1 digital output and RS485 communication
- 2MB internal flash memory
- Dielectric strength more than 2KV
- Easy to install with auto-wiring correction function
- FCC, CE, EMC, & LVD certification
- Mean time between failure (MTBF) reliability more than 60,000 hours

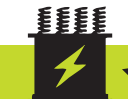
Application:

- ⊙ Motor control panel / Power measurement
- ⊙ Main panel, sub-panel, power parameter management
- ⊙ Time of Use (TOU) function
- ⊙ Power quality analysis

Target markets:



Infrastructure



Power facilities



Commercial Buildings



Continuous production industry

Universal

CPM-20 Series

Multifunction Power Meter



- Sampling rate: 128 points / cycle
- Energy Accuracy: 0.5%
- With power demand, Time of Use (TOU), CO² emissions calculation
- Provide 33 kinds of electric parameter measurement, maximum / minimum value recording
- Up to 2 digital input, 2 digital output and RS485 communication
- 2MB internal flash memory
- Dielectric strength more than 2KV
- FCC, CE, EMC, & LVD certification
- Mean time between failure (MTBF) reliability more than 60,000 hours

Application:

- ⊙ Power system, sub-panel, power parameter measurement
- ⊙ Electromechanical equipment electricity consumption monitoring
- ⊙ Time of Use (TOU) calculation
- ⊙ High CPI value

CPM-12 Series

Multifunction Power Meter



- Sampling rate: 128 points / cycle
- Energy Accuracy: 1%
- With total harmonic, import / export power measurement, CO² emissions calculation
- Provide 32 kinds of parameter measurement, maximum / minimum value recording
- Easy to install with auto-wiring correction
- With 1 pulse output and RS485 communication
- Dielectric strength more than 2KV
- FCC, CE, EMC, & LVD certification
- Mean time between failure (MTBF) reliability more than 60,000 hours

Application:

- ⊙ Motor control panel / Power monitoring
- ⊙ Power consumption monitoring and control
- ⊙ Distribution panel system
- ⊙ Smart Building Automation / Energy Management System

CPM-10 Series

Economic Multifunction Power Meter



- Support balanced / unbalanced power system (3P3W, 3P4W, 1P2W, 1P3W)
- With unique dual-window display (10 digits + 4 digits)
- Energy Accuracy: 0.5%
- Provide 1 relays / 1 analog output
- Optional pulse and RS485 output
- Provide a variety of electric parameter measurement
- Compact size, suitable for standard DIN size (96 * 48mm)
- CE, EMC, & LVD certification
- Mean time between failure (MTBF) reliability more than 60,000 hours

Application:

- ⊙ Motor control panel / Power monitoring
- ⊙ Power consumption monitoring and control
- ⊙ Distribution panel system
- ⊙ Smart Building Automation / Energy Management System
- ⊙ Power test equipment

Economic

Target markets:



Din Rail

AEM-DRA series

Multi - Circuit Power Meter

8 Three-Phase Loops +
2 Main Circuits



- Large display window, easy to install, suitable for standard din-rail mounting
- With power demand, CO² emissions calculation
- Provide individual harmonic measurement function (2nd ~ 31th)
- Provide 48 kinds of electric parameter measurement, maximum / minimum value recording
- Energy accuracy: 0.5%
- Support 2 individual main circuits, programmable mixture of wiring system (3P3W, 3P4W, 1P2W, 1P3W)
- Provide 8 three-phase or 24 single-phase loops measurement or mixture
- Optional 4 relay output, 2 digital input, 1 pulse output and dual RS485 communication
- 2MB internal flash memory
- Available communication protocols (Ethernet *)
- Dielectric strength more than 2KV,
- FCC, CE, EMC, & LVD certification
- Mean Time Between Failure (MTBF) reliability more than 60,000 hours

Application:

- ⊙ For suites, shopping malls, dorm electricity bills
- ⊙ Hybrid power system power measurement
- ⊙ Long-hour data logging for power quality analysis
- ⊙ Main panel, distribution panel, power demand measurement
- ⊙ Electromechanical equipment electricity consumption monitoring

AEM-DR series

Multi - Loop Power Meter

5 Single-Phase Loops
/ 1 (Main) Circuit



- Support 5 single-phase Loops power measurement (3P3W, 3P4W, 1P2W, 1P3W)
- Simple din-rail installation, compact size : 54 * 81mm (without Relay module)
- Provide 34 kinds of parameter measurement, maximum / minimum value recording
- Energy accuracy : 0.5%
- Extensional 5 relay output module
- Support WiFi & NB-IoT
- Dielectric strength more than 2KV,
- Mean Time Between Failure (MTBF) reliability more than 60,000 hours
- FCC, CE, EMC, & LVD Certification

Application:

- ⊙ Suites, shopping malls, dorm electricity bills
- ⊙ Main panel, distribution panel, power demand measurement
- ⊙ Long-hour data logging for power quality analysis
- ⊙ Electromechanical equipment electricity consumption monitoring
- ⊙ Limited space

CPM-12D series

Multifunction Power Meter



- Sampling rate: 128 point/cycle
- Energy accuracy: 1.0%
- True RMS Measurement
- 2MB internal flash memory
- Provide 50 kinds of parameter measurement
- Power demand, data logging, and Time-of-use (TOU) function, CO² emissions calculation.
- Built-in 1 Pulse Output & 1 RS485 communication port.
- Dielectric strength more than 2 KV

Application:

- ⊙ Energy management system
- ⊙ Factory automation
- ⊙ Intelligent power panel
- ⊙ Industrial automation
- ⊙ Power Grid automation
- ⊙ Community power monitoring
- ⊙ Intelligent green building

Target markets:



DC Type

AEM-DD series

Multi-Loop Power Meter



- Support 5 single-phase Loops DC power measurement
- Simple din-rail installation, compact size : 54 * 81mm (without relay module)
- Provide 11 kinds of parameter measurement, maximum / minimum value recording
- Energy accuracy: 0.5%
- 2 line 6-digits value display simultaneously
- 1MB internal flash memory
- Extensional 5 relay output module
- Dielectric strength more than 2KV
- FCC, CE, EMC, & LVD certification
- Mean Time Between Failure (MTBF) reliability more than 60,000 hours

Application:

- ⊙ Suitable for DC power system
- ⊙ Multi-Loop DC power parameter measurement
- ⊙ Electromechanical equipment electricity consumption monitoring
- ⊙ DC power measurement system
- ⊙ Upgrade or maintenance of old system
- ⊙ Solar power, wind power system and energy storage / Measurement of DC parameters of the system

VAW Series

Multifunton DC Power Meter



- Provide DC voltage, current, power parameter measurement and operation time calculation
- With a unique dual-window display (10 digits +5 digits)
- Energy Accuracy: 0.1%
- Provide bidirectional energy measurement
- Sampling rate : 15 points / second
- The reaction time is less than 100 milliseconds
- Optional 4 relays output, 2 external control input / 1 analog output and RS485 communication
- Relay can set to multiple power parameters for alarm
- Dielectric strength more than 2KV
- EMC & LVD certification

Application:

- ⊙ Solar & wind power system
- ⊙ DC power measurement system
- ⊙ Battery Energy Storage monitoring
- ⊙ Measurement and testing equipment
- ⊙ Portable 3c device

Target markets:



Power facilities

Commercial Buildings

Infrastructure

ADP-PM Series

Multi-Circiut Power Meter



- Sampling rate: 128 point/cycle
- Energy accuracy: 1.0%
- True RMS Measurement
- Modular design with Remote IO module in one rack.
- Up to 12 single phase or 4 three-phase circuit power input.
- Software programmable input. EEPROM auto-configuration.
- 2MB internal flash memory
- Provide 50 kinds of parameter measurement
- Power demand, data logging, and Time-of-use (TOU) function.
- Built-in 1 Pulse Output & 1 RS485 communication port.
- Dielectric strength more than 2 KV

Application:

- ⊙ Rental Building / House Apartment
- ⊙ School Dormitory / Exhibition Booth
- ⊙ Market Stalls
- ⊙ Food Court / Movable House
- ⊙ Distributed Electricity Measurement

Target markets:



Continuous production industry

Commercial Buildings

Energy system

Model No.	VAW series	CPM10	CPM series				CPM70 series			CPM80 series				
	VAW	-10	-12	-20	-21	-71	-72	-73	-81	-82	-83	-85	-87	
Installation		Panel							Panel					
Present values														
Phase / Neutral current	--	■	■	■	■	■	■	■	■	■	■	■	■	
Average voltage / Phase voltage /Line voltage	--	■	■	■	■	■	■	■	■	■	■	■	■	
Frequency	--	■	■	■	■	■	■	■	■	■	■	■	■	
Active / Reactive / Apparent power / Total power	■	■	■	■	■	■	■	■	■	■	■	■	■	
Power Factor / Average Power Factor	--	■	■	■	■	■	■	■	■	■	■	■	■	
Demand values														
Current demand	--	--	--	--	■	--	■	■	--	■	■	■	■	
Present average	--	--	--	--	■	--	■	■	--	■	■	■	■	
Active / Reactive / Apparent power demand	--	--	--	--	■	--	■	■	--	■	■	■	■	
Max. Current / Power demand	--	--	--	--	■	--	■	■	--	■	■	■	■	
Demand calculation methods(sliding / fixed)	--	--	--	--	■	--	■	■	--	■	■	■	■	
Demand interval setting	--	--	--	--	■	--	■	■	--	■	■	■	■	
Power quality measurements														
THD measurement	--	--	■	■	■	■	■	■	■	■	■	■	■	
Total harmonic distortion (THD) voltage / current	--	--	■	■	■	■	■	■	■	■	■	■	■	
Individual harmonic distortion (2nd ~ 31th)	--	--	--	--	--	--	■	■	--	■	■	■	■	
Individual harmonic distortion (2nd ~ 63th)	--	--	--	--	--	--	--	--	--	■	■	■	■	
Other measurements:														
Digital Input / Output	--	--	--	--	■	■	■	■	■	■	■	■	■	
Run hours	■	--	■	--	--	■	■	■	■	■	■	■	■	
Carbon emissions calculation (CO2)	--	--	■	■	■	■	■	■	■	■	■	■	■	
Electricity rate (single rate)	--	--	--	■	■	■	■	■	■	■	■	■	■	
Time of use (TOU, 4 Time zone ,8 Time table)	--	--	--	■	■	--	--	■	--	--	■	■	■	
Measurement type(three-phase / single-phase)	--	■	■	■	■	■	■	■	■	■	■	■	■	
Load type display (R / L / C)	--	--	--	■	■	■	■	■	■	■	■	■	■	
Max. / Min. display and recording	■	--	--	--	■	■	■	■	■	■	■	■	■	
Record														
Maximum / Minimum value (present value + definition of each phase)	■	--	--	--	■	■	■	■	■	■	■	■	■	
Alarm records	■	--	--	■	■	■	■	■	■	■	■	■	■	
Data storage	■	--	--	■	■	■	■	■	■	■	■	■	■	
Firmware upgrade	--	--	--	--	--	■	■	■	■	■	■	■	■	
alarm and event records	--	--	--	■	■	■	■	■	■	■	■	■	■	
Modbus	--	--	■	■	■	■	■	■	■	■	■	■	■	
Loading percentage indication	--	--	--	■	■	■	■	■	■	■	■	■	■	
Simultaneous display of four kinds of data	■	--	■	■	■	■	■	■	■	■	■	■	■	
Panel integration screen	■	■	■	■	■	■	■	■	■	■	■	■	■	
Auto-Wiring Correction	--	--	■	--	--	■	■	■	■	■	■	■	■	

Model No.	AEM series			CPM series	ADP series
	- DR	- DRA	- DD	- 12D	ADP-PM-A
Installation	Din - Rail				
Present values					
Phase / Neutral current	■	■	--	■	■
Average voltage / Phase voltage /Line voltage	■	■	--	■	■
Frequency	■	■	--	■	■
Active / Reactive / Apparent power / Total power	■	■	■	■	■
Power Factor / Average Power Factor	■	■	--	■	■
Demand values					
Current demand	--	■	--	■	■
Present average	--	■	--	■	■
Active / Reactive / Apparent power demand	--	■	--	■	■
Max. Current / Power demand	--	■	--	■	--
Demand calculation methods(sliding / fixed)	--	■	--	■	■
Demand interval setting	--	■	--	■	--
Power quality measurements					
THD measurement	--	■	--	■	■
Total harmonic distortion (THD) voltage / current	--	■	--	■	■
Individual harmonic distortion (2nd ~ 31th)	--	■	--	--	--
Individual harmonic distortion (2nd ~ 63th)	--	--	--	--	--
Other measurements:					
Digital Input / Output	--	■	--	--	■ ※
Run hours	--	■	--	■	■
Carbon emissions calculation (CO2)	--	--	--	■	--
Electricity rate (single rate)	--	■	--	■	■
Time of use (TOU, 4 Time zone ,8 Time table)	--	■	--	■	■
Measurement type(three-phase / single-phase)	■	■	--	■	■
Load type display (R / L / C)	--	--	--	--	--
Max. / Min. display and recording	--	■	--	■	■
Record					
Maximum / Minimum value (present value + definition of each phase)	--	■	--	■	■
Alarm records	■	■	■	■	■
Data storage	■	■	■	■	■
Firmware upgrade	■	■	--	■	■
alarm and event records	--	■	--	■	■
Modbus	■	■	■	■	■
Loading percentage indication	■	■	--	■	--
Simultaneous display of four kinds of data	--	■	--	■	--
Panel integration screen	■	■	■	■	--
Auto-Wiring Correction	--	--	--	■	--

	VAW series	CPM10	CPM series			CPM70series		
Model Name	VAW	-10	-12	-20	-21	-71	-72	-73
LCD								
Specifications / measurement parameters								
Input voltage (with external PT up to 500,000Vac)								
Input measurement range (Vac, L-N)	0~600Vdc	50~500	40~400			40~400		
Frequency (Hz)	--		45 ~ 65					
Current (A)	0~10A	1A/5A	1~120% Rated			1~120% Rated		
Current measurement range	0~10A	1A/5A	1~120% Rated			1~120% Rated		
Resistance to current capacity	300% Rated	300% Rated	200% Rated			300% Rated		
Power consumption (VA)	<5	<12	<10			<10		
control power supply								
Operation range		AC:85~264 DC:100~300						
Frequency	--		45 ~ 65					
Measurement accuracy								
Measurement Loop (single phase)	1	1	1	1	1			
Measuring Loop (three phase)	--	1	1	1	1			
Valid / invalid / apparent power	0.1%	0.5%	1%	0.5%		0.5%		
Current / phase	0.04%	0.2%	0.5%	0.25%		0.2%		
Voltage (L-N)	0.04%	0.2%	0.5%	0.25%		0.2%		
Frequency	--	0.2%	0.2%	0.2%		0.1%		
Active power accuracy	0.1%	0.5%	1%	0.5%		0.5s class		
Inactive power accuracy	--	0.5%	1%	0.5%		2 class		
Digital output								
Open collector output	--	1 set*	1 set	--	2 set	1 set		
Maximum external voltage	--	30Vdc	40Vdc	--	40Vdc	30Vdc		
Maximum load current	--	30mA	50mA	--	50mA	30mA		
Isolation ability			2KVac					
Communication & Display								
RS-485 Modbus RTU, Jbus	2-wire, Baud Rate: 9600/19200/38400, Data Bits: 8, Parity Bits: Even, Odd, None, Stop Bits: 1 or 2							
The second Modbus communication port	--	--	--	--	--	--	--	--
Ethernet	--	--	--	--	--	--	--	--
BACnet	--	--	--	--	--	*	*	*
WiFi	--	--	--	--	--	--	--	--
NB-IoT	--	--	--	--	--	--	--	--
Isolation ability			2KVac					
Back Light	Red & Green	Red & Green	White light black					
Visual range (mm)	7.1	7.1	65x61			65x61		
Language			English					
Continue								

* : Optional Communication Port

CPM80 series					AEM series			CPM series	ADP series	
-81	-82	-83	-85	-87	-DR	-DRA	-DD	- 12D	ADP-PM-A	
LCD										
Specifications / measurement parameters										
Input voltage (with external PT up to 500,000Vac)										
40~400					40~400Vac		10~100V dc	40~400	≤ 400V	
45 ~ 65					45 ~ 65		--	45~65	45 ~ 65	
1~120% Rated					1~120% Rated			1A / 5A	1~120% Rated	
1~120% Rated					1~120% Rated			1~120% Rated	1~120% Rated	
200% Rated					120% Rated			200% Rated	120% Rated	
<15					<10	<15	<10	<5	<5	
control power supply										
AC:85~264 DC:100~300								DC 10~60V		
45 ~ 65					45 ~ 65		--	45 ~ 65	45 ~ 65	
Measurement accuracy										
1					5	24	5	1	4	
1					2	8	--	1	4	
0.25					0.5%		0.3%	1%	1.0%	
0.1%					0.25%		0.2%	0.5%	0.5%	
0.1%					0.25%		0.2%	0.5%	0.5%	
0.2%					0.2%		--	0.1%	0.2%	
0.2s class					0.5%		0.5%	1%	1.0%	
1s class					0.5%		--	1%	1.0%	
Digital output										
2 set					--	1 set	--	1 set	1 set	
30Vdc					--	40Vdc	--	40Vdc	30Vdc	
30mA					--	50mA	--	50mA	30mA	
2KVac					2KVac			2KVac	1.5KV	
Communication & Display										
wire, Baud Rate: 9600/19200/38400, Data Bits: 8, Parity Bits: Even, Odd, None, Stop Bits: 1 or 2								UP to 115200bps		
*	*	*	*	*	--	*	--	--	--	
*	*	*	*	*	--	*	--	--	--	
--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	*	--	--	--	--	
--	--	--	--	--	*	--	--	--	--	
					2KVac			1.5Vdc		
Color					White light black			White light black	--	
320x240					39x2 1	128x6 4	39x21	320x240	--	
English										
Continue										

* : Optional Communication Port

	VAW series	CPM10	CPM series			CPM70 series		
Model Name	VAW	-10	-12	-20	-21	-71	-72	-73
Alarm and control								
Alarm parameter type	5	25	--	33		33		
Response time (ms)	<100ms	<100ms	<100ms	<300ms		<300ms		
Internal Memory (MB)	--	--	--	1MB	2MB	2MB	2MB	2MB
Number of digital input	2 set	--	--	--	2 set	4 set	4 set	4 set
Number of digital output	--	3 set	--	--	2 set	1 set	1 set	1 set
Number of analog output	1 set*	1 set*	--	--	--	--	--	--
Number of relay contact output	4 set*	3 set*	--	--	--	2 set*	2 set*	2 set*
Number of pulse output	1 set*	1 set*	1 set*	--	2 set*	1 set*	1 set*	1 set*
Electromagnetic compatibility								
IEC 61000-3-2	--	■	■	--	--	■	■	■
IEC 61000-3-3	--	■	■	--	--	■	■	■
IEC61000-4-2~6	--	--	■	--	--	■	■	■
IEC 61000-4-8	--	--	■	--	--	■	■	■
IEC 61000-4-11	--	--	■	--	--	■	■	■
EN 55022 Class B	--	--	--	--	--	■	■	■
IEC 61010-1 Ed 3	■	■	■	■	■	■	■	■
IEC 62052-11	--	--	--	--	--	■	■	■
IEC 61557-12	--	--	--	--	--	■	■	■
EN 61326-1	■	■	■	■	■	■	■	■
FCC part 15	--	--	■	■	■	■	■	■
Physical parameters								
Cover protection level (IP)	52	52	50	50		50		
Size(mm)	96x48	96x48	96x96			96x96		
Depth(mm)	120	120	70			77		
Thickness(mm)	8	8	1~18			1~18		
Operating temperature (°C)	0~60	0~60	0~60			0~60		
Header temperature (°C)	0~60	0~60	0~60			0~60		
Panel temperature (-25 °C will reduce the efficiency)	-10~70	-10~70	-10~70			-25~50		
Storage temperature	-10~70	-10~70	-10~70			-10~70		
Humidity range (non-condensing)	20~95%	20~95%	5~95%			5~95%		
Weights(g)	350	350	<400	<400		<450		

CPM80 series					AEM series			CPM series	ADP series
-81	-82	-83	-85	-87	-DR	-DRA	-DD	- 12D	ADP-PM-A
Alarm and control									
48					34		11	>50	50
<500ms					<500ms			<500ms	<500ms
4MB	4MB	4MB	4MB	4MB	1MB	2MB	1MB	2MB	2MB
8 Set*	8 Set*	8 Set*	8 Set*	8 Set*	--	2 set	--	--	32 set*
4 set*	4 set*	4 set*	4 set*	4 set*	--	1 set	--	--	32 set*
2 set*	2 set*	2 set*	2 set*	2 set*	--	--	--	--	8 set*
4 set*	4 set*	4 set*	4 set*	4 set*	5 set	4 set	5 set	--	16 set*
2 set*	2 set*	2 set*	2 set*	2 set*	--	1 set*	--	1 set	1 set
Electromagnetic compatibility									
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	--	--	■	■	■
■	■	■	■	■	--	--	--	■	■
■	■	■	■	■	--	--	■	■	■
■	■	■	■	■	--	--	--	--	--
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	--	--	--	--	--
■	■	■	■	■	--	--	--	--	--
■	■	■	■	■	■	■	■	--	■
■	■	■	■	■	■	■	■	■	■
Physical parameters									
50					50				20
96x96					54x81	199x118	54x81	72x91.5	48x130
101					65	77	65	58.7	120
1~18					<1			<1	<1
0~60					0~60			0~60	-25~70
0~60					0~60			0~60	-25~70
-25~50					-10~70			-10~70	
-10~70					-10~70			-10~70	-30~75
5~95%					5~95%			3~95%	
<600					185	750	185	<400	



ADTEK

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