



CVM-D420-MC, Multi-channel network analyser with memory, DIN rail

Code: M551A2.

> Protocol: Modbus/TCP | Modbus/RTU

> Memory: Yes

> Communications: Wi-Fi | Ethernet | RS-485

> Transistor output: 2

> Harmonics: 15

> Input current: .../250 mA > Mounting: DIN rail

> Na Input channels: 1...2(III) | 1...12(II)

### Description

The CVM-D400 series are multi-channel power analysers designed for reading multiple loads or circuits (Branch Circuit Monitoring). These devices can manage up to 12 single-phase or 4 three-phase lines or loads, or any combination of them in a single device. They also allow each type of consumption to be labelled, grouping together the total consumption of all the loads destined for the same purpose without the need for any type of programming. The results are automatically displayed on screen or via communications. The devices are configured via an integrated web interface, accessible via Wi-Fi or Ethernet, or directly from the MyConfig App. Both options allow the connection to be checked and modified via the 'autowiring' option, avoiding wiring errors and saving time during commissioning.

### **Application**

- o Measurement of electrical parameters in multi-channel installations, such as data processing centres and switchboards of single-phase loads.
- Simultaneous measurement at 4 different points in three-phase installations
- o Its compact size is perfect for assembly on electric panels.







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## **Specifications**

Size (mm) width x height x depth	105 x 104 x 72 (mm)		
Envelope	Self-extinguishing V0 plastic		
Fastening	DIN rail		
Weight (kg)	0,39		
nvironmental characteristics			
Protection class	IP30, Front panel: IP42		
Relative humidity (without condensation)	5 95%		
Storage temperature	10 °C +75 °C		
Working temperature	-10 °C +60 °C		
urrent measurement circuit			
Installation category	CAT III 300 V		
Nominal current (In)	/ 0,250 A		
Maximum input current consumption	0,18 VA x 2		
Maximum current	275 mA		
Minimum current measurement	13 mA		
oltage measurement circuit			
Installation category	CAT III 300 V		
Sampling frequency	4565 Hz		
Input impedance	0,4 ΜΩ		
Frequency measuring range	4565 Hz		
Voltage measuring range	120 300 V~Ph-N / 120 520 V ~ph-ph		
Maximum input voltage consumption	58 VA		
Minimum measurement voltage (Vstart)	120 V ~		
ommunication Network			
Connection mechanism	RJ-45		
Connection mode	DHCP ON/OFF		
Protocol	Modbus TCP - Web server - Web socket		
Technology / Type	Ethernet 10BaseT - 100BaseTX		
andards			
Electrical safety, Maximum height (m)	2000		
Electrical safety, Installation category	CAT III 300 V		
Electrical safety, Contamination level/class	Pollution resistance 2		







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61000-6-3, UNE-EN 61000-6-1, UNE-EN 61010-1, UNE-EN 60068-2-1, UNE-EN 60068-2-2,UNE-EN 60068-2-78, IEC 61010-2-030, IEC 61326-1, UNE-EN 61000-4-20, ETSI EN 301 489-1 V2.2.3, ETSI EN 301 489-17 V3.2.4

#### User interface

LED	2 LED
Keyboard	3 keys
Display type	LCD

### Digital transistor outputs

Pulse width	30 500 ms
Quantity	2
Туре	NPN
Maximum frequency	5 imp/s
Maximum current	50 mA
Maximum voltage	24 Vdc

#### Measurement accuracy

Phase current measurement	0,5% (5 110%)
Active energy measurement (kWh)	1%
Active power measurement (kW)	1%
Phase voltage measurement	0,5%

### Serial communication

Protocol	Modbus RTU
Technology / Type	RS-485

### Wireless communication

Band	2,4 GHz (2,42,5 GHz)
Technology / Type	Wi-Fi

### CVM-D400

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CODE	TYPE	Input current	N <sup>a</sup> Input channels	Transistor output	Communications	Protocol	Harmonics	Clamp
M551A2.	CVM-D420-MC	/250 mA	12(III)   112(II)	2	Wi-Fi   Ethernet   RS-485	Modbus/TCP   Modbus/RTU	15	
M55132.	CVM-D421-SCV	/333 mV	12(III)   16(II)	2	Wi-Fi   Ethernet   RS-485	Modbus/TCP   Modbus/RTU	15	
M551A4.	CVM-D440-MC	/250 mA	14(III)   112(II)	4	Wi-Fi   Ethernet   RS-485	Modbus/TCP   Modbus/RTU	15	
M55134.	CVM-D441-SCV	/333 mV	14(III)   112(II)	4	Wi-Fi   Ethernet   RS-485	Modbus/TCP   Modbus/RTU	15	
Kits								
M55136.	kit CVM-D421+2xSCV1	/333 mV	12(III)   16(II)	2	Wi-Fi   Ethernet   RS-486	Modbus/TCP   Modbus/RTU	15	3 x SCV
M55138.	kit CVM-D441+4xSCV1	/333 mV	14(III)   112(II)	4	Wi-Fi   Ethernet   RS-487	Modbus/TCP   Modbus/RTU	15	3 x SVC







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The -MC models require MC1/MC3 type transformers and the -SCV require SCV1 type transformers







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#### Dimensions Connections



