

Standalone type


Front



Back



Bottom

User's Manual



Video


Rack mount type


Front



Back



Bottom


■ Features

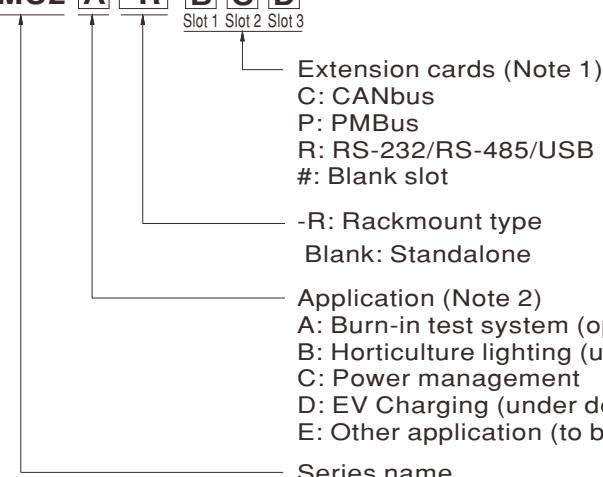
- Integration on system power
- 2 models in 3U 19-inch rackmount and standalone configurations
- 7" touch Panel and buttons for easy on-site operation
- Ethernet port for on-site or remote monitor and control over the system
- Selectable PMBus, CANbus, RS-485, and RS-232 communication protocols
- Support Data/ Event log with date and time
- Support max. 32G SDHC SD card
- Four user programmable relay outputs for conventional remote monitoring or warning
- Web-based monitor/control UI provided for various applications
- 5 years warranty

■ Applications

- Industrial automation
- EV Charging station
- Burn-in systems
- UV curing equipment
- Laser diode machines
- Telecommunication systems
- Horticulture lighting
- Building decoration lighting

■ GTIN CODE
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>
■ Description

CMU2 is a fully digitalized smart controller that can execute tasks of monitoring and controlling over power system. CMU2 implements a 7" LCD touch panel to achieve intuitive operation, and developed a brand new web monitoring page for faster and smarter management. CMU2 not only being used to monitor the operating parameters and data of PSUs, such as output voltage, output current, internal temperature, fan rpm, series number and firmware version, but also can be used to adjust output voltage and current. In addition, it can remotely control single PSU or entire power system through LAN or internet.

■ Model Encoding
CMU2 **A** **-R-** **B** **C** **D**


Extension cards (Note 1)

C: CANbus

P: PMBus

R: RS-232/RS-485/USB

#: Blank slot

-R: Rackmount type

Blank: Standalone

Application (Note 2)

A: Burn-in test system (optional)

B: Horticulture lighting (under development)

C: Power management

D: EV Charging (under development) Note 1: Fixed by application

E: Other application (to be defined) Note 2: Please contact MEAN WELL or

access the installation manual

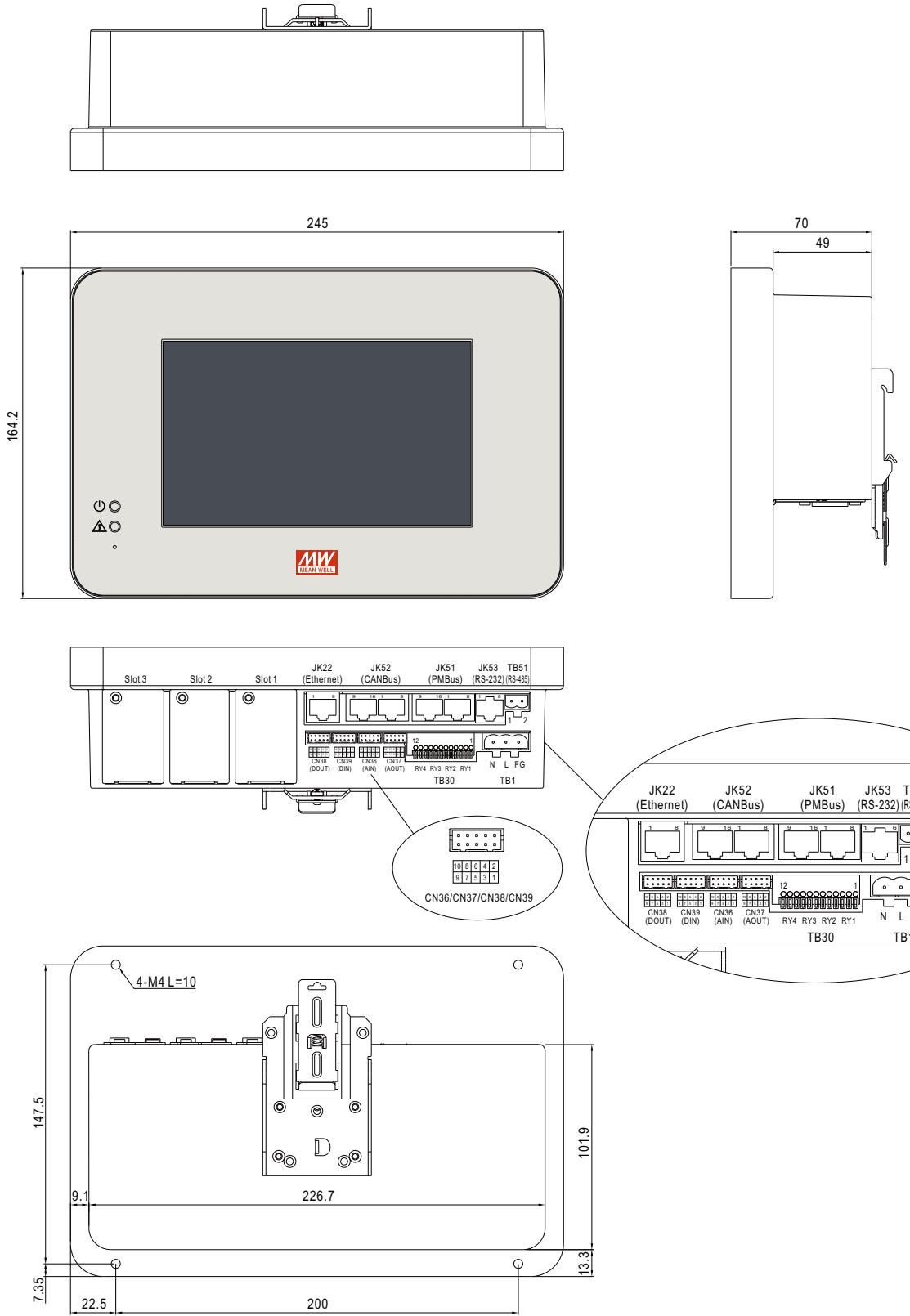


SPECIFICATION

MODEL (Note.8)	CMU2□	CMU2□ -R
OUTPUT	LCD DISPLAY	Display the DC output voltage, current, and status of each PSU
	LED INDICATOR	Green: Power on/ Normal Red: Fault/ Abnormal
	RELAY CONTACT	Note.4 4 user programmable channels, 30V/1A
	ANALOG OUTPUT	Note.4 5 user programmable channels, 0-10V
INPUT	DIGITAL OUTPUT	Note.4 5 user programmable channels, open collector signal
	VOLTAGE RANGE	85 ~ 264VAC; 120-370VDC
	FREQUENCY RANGE	47 ~ 63Hz
	CURRENT	0.6A / 115VAC 0.4A / 230VAC
	ANALOG INPUT	Note.4 5 Channels, 0-10V, 12bit resolution
FUNCTION	DIGITAL INPUT	Note.4 5 Channels, open collector signal
	MONITORED	I/P & O/P Voltage, O/P current, temperature, fan rpm
	COMM. INTERFACE	Note.1 PMBus, CANbus, RS-485, RS-232
	SD CARD SLOT	SDHC 32GB Max.
	FIRMWARE UPDATE	Update can be done via SD card or Ethernet access
	UI LANGUAGE	English, Traditional/Simplified Chinese
	LOG	Record data and events
COMMUNICATION PROTOCOLS	BUZZER	Alarms, mute
	PMBUS	Note.4 PMBus v1.1
	CANBUS	Note.4 CANbus 2.0B
	NETWORK	Support IEEE802.3, 10/100base network
ETHERNET SUPPORTED	EXTENSION CARDS	Note.1 Extension Cards
	PROTOCOLS	TCP/IP, NTP, SMTP, Modbus TCP
	WEB SERVER	Display status of system, parameters, data being logged or download
EXTENSION CARDS	PMBUS	Note.7 2 PMBus ports, PMBus V1.1
	CANBUS	Note.7 2 CANBus ports, CANBus 2.0B
	USB/RS-232/RS-485	2 USB ports, RS-232 port, RS-485 port
DISPLAY	LCD PANEL	Note.2 7" TFT LCD, resolution 800x480, capacitive touch panel Details of settings please refer to user's manual
ENVIRONMENT	WORKING TEMP.	Note.2 -25 ~ +60°C
	STORAGE TEMP.	-40 ~ +60°C
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC62368-1, BS EN/EN62368-1 approved
	WITHSTAND VOLTAGE	Note.3 I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.7KVDC
	ISOLATION RESISTANCE	Note.3 O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Conduction Class B, Radiation Class A; BS EN/EN61000-3-2,-3
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61000-6-1(BS EN/EN50082-2), light industry level, criteria A
	MTBF	680K hrs min. Telcordia TR/SR-332 (Bellcore) ; 75.9K hrs min. MIL-HDBK-217F (25°C)
	DIMENSION	245*70*164.2mm (L*W*H)
NOTE	PACKING	1.68Kg; 8pcs/14.4Kg/2.14CUFT
	1. Depend on application. 2. LCD may freeze under -20°C. 3. CN36,CN37 are considered as O/P. 4. All functions of signal connectors: DIN/DOUT,AIN/AOUT,Relay,RS-232,RS-485,PMBus,CANBus are defined by application. Please check installation manual for detail. 5. The controller is considered a component which will be installed into a final equipment. EMC is tested by the controller unit, no control equipment is connected. The final equipment must re-confirmed that still meets EMC directives. For guidance on how to perform these EMC test, Please refer to "EMI testing of component power supplies".(as available on http://www.meanwell.com) 6. The RTC power supply used super capacitors, which can last for only 7 days. If the time exceeds the limit, the RTC date must be re-adjusted. 7. Up to 40 power supplies can be operate in parallel connection, and possible up to 48 power supplies. 8. Order model only CMU2C-P##, CMU2C-R-P##, CMU2C-C##, CMU2C-R-C## and optional CMU2A-#R# available. ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx	483.6*66.3*132mm (L*W*H) 2.16Kg; 6pcs/14Kg/2.91CUFT

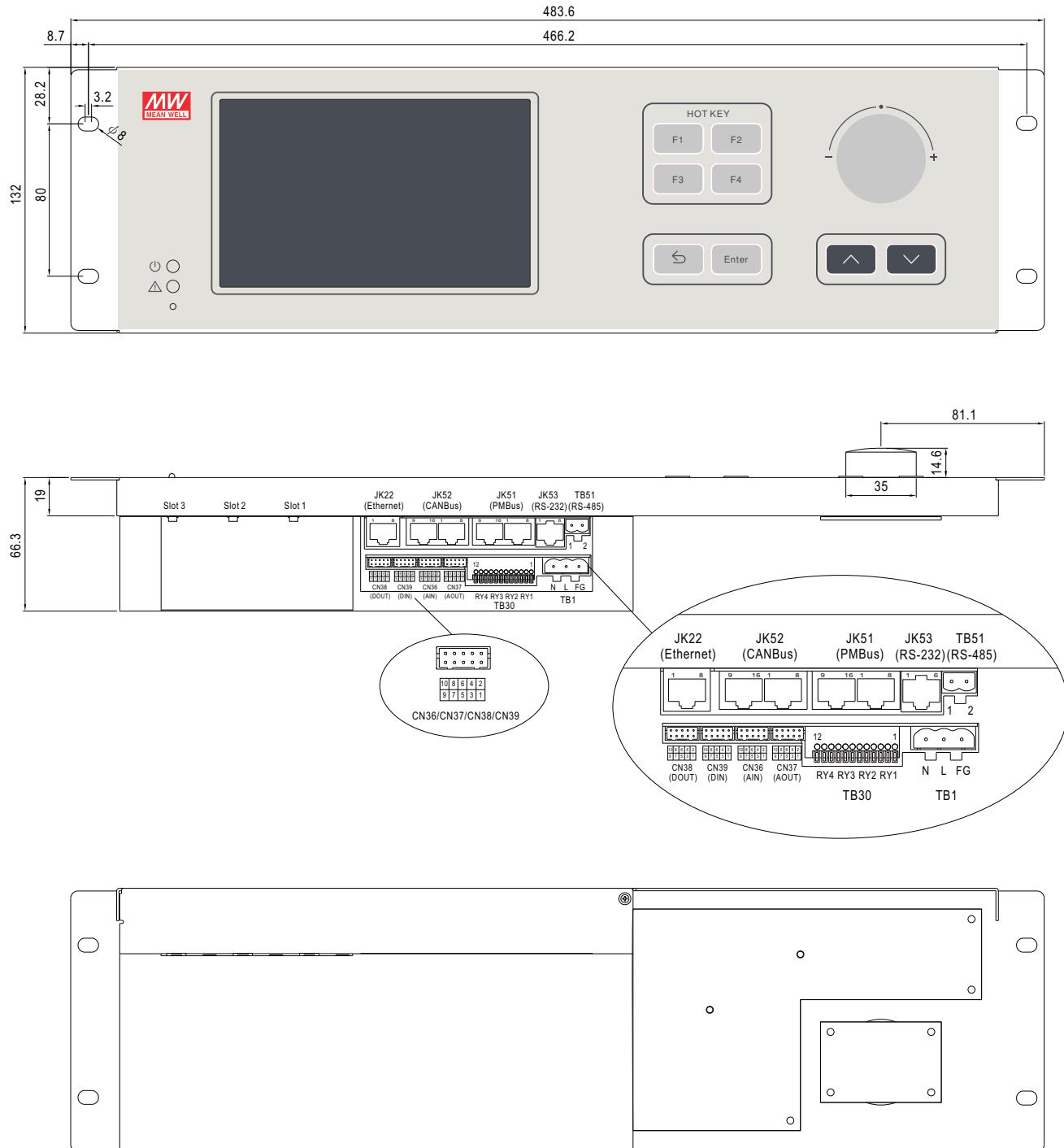
■ Mechanical Specification (Single Unit)

Case No. CUM2 Unit:mm



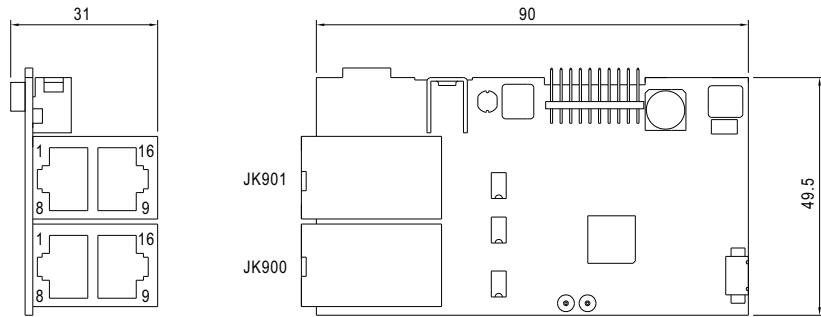
■ Mechanical Specification (Rack System)

Case No. CMU2-RACK Unit:mm

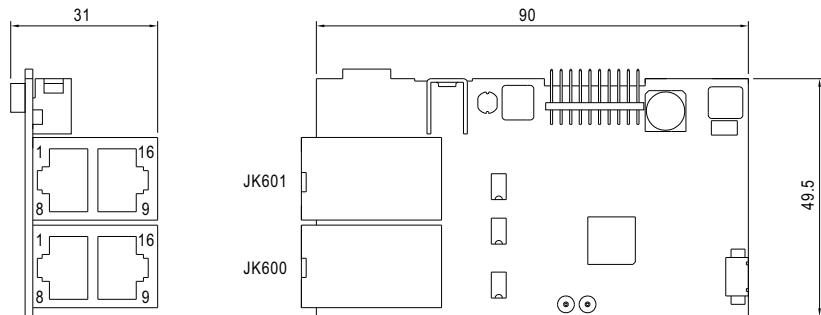


■ Mechanical Specification (Extension cards)

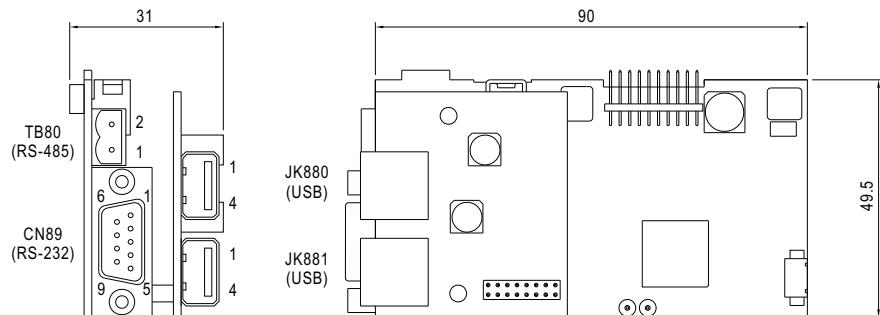
※ PMBus(P card)



※ CANBus(C card)



※ RS-232/RS485/USB(R card)



※ LED Status Indicators & Corresponding Signal at Function Pins

LED	Description
Green	The power supply functions normally
Red	The LED will present a constant red light when the abnormal status arises

※ AC IN Connector Pin No. Assignment (TB1):

Pin No.	Function	Description
1	AC/N	AC input neutral wire
2	AC/L	AC input live wire
3	FG	FG wire

※ Relay Connector Pin No. Assignment (TB30): DECA MX422-25412 or equivalent

Pin No.	Function	Description
1	Relay1-NO	Normal-open contact of programmable relay1
2	Relay1-NC	Normal-close contact of programmable relay1
3	Relay1-COM	Common for relay1 NO/NC contact
4	Relay2-NO	Normal-open contact of programmable relay2
5	Relay2-NC	Normal-close contact of programmable relay2
6	Relay2-COM	Common for relay2 NO/NC contact
7	Relay3-NO	Normal-open contact of programmable relay3
8	Relay3-NC	Normal-close contact of programmable relay3
9	Relay3-COM	Common for relay3 NO/NC contact
10	Relay4-NO	Normal-open contact of programmable relay4
11	Relay4-NC	Normal-close contact of programmable relay4
12	Relay4-COM	Common for relay4 NO/NC contact

※ AIN Connector Pin No. Assignment (CN36): HIROSE DF11-10 or equivalent

Pin No.	Function	Description
1	AIN 1	The Analog input signal with GND as reference
2,4,6,8,10	GND	Common GND for AINx
3	AIN 2	The Analog input signal with GND as reference
5	AIN 3	
7	AIN 4	
9	AIN 5	

※ AOUT Connector Pin No. Assignment (CN37): HIROSE DF11-10 or equivalent

Pin No.	Function	Description
1	AOUT 1	The Analog output signal with GND as reference
2,4,6,8,10	GND	Common GND for AOUTx
3	AOUT 2	The Analog output signal with GND as reference
5	AOUT 3	
7	AOUT 4	
9	AOUT 5	

※ DOUT Connector Pin No. Assignment (CN38): HIROSE DF11-10 or equivalent

Pin No.	Function	Description
1	DOUT 1	The isolated digital output signal with FG as reference Open collector signal, Max. singal voltage is 5V with FG as reference
2,4,6,8,10	FG	Common FG for DOUTx
3	DOUT 2	The isolated digital output signal with FG as reference Open collector signal, Max. singal voltage is 5V with FG as reference
5	DOUT 3	
7	DOUT 4	
9	DOUT 5	

❁ DIN Connector Pin No. Assignment (CN39)

Pin No.	Function	Description
1	DIN 1	The isolated digital input signal with FG as reference Open from FG or +5V : Logic "1" input to CMU2 Short to FG or 0V : Logic "0" input to CMU2
2,4,6,8,10	FG	Common FG for DINx
3	DIN 2	
5	DIN 3	The isolated digital input signal with FG as reference Open from FG or +5V : Logic "1" input to CMU2
7	DIN 4	Short to FG or 0V : Logic "0" input to CMU2
9	DIN 5	

❁ RS-485 Connector Pin No. Assignment (TB51) & Extension Cards(RS-485(TB80)): DECA ME030-5802 or equivalent

Pin No.	Function	Description
1	D- / DB	Differential digital signal used in the RS485 interface
2	D+ / DA	Differential digital signal used in the RS485 interface

❁ RS-232 Connector Pin No. Assignment (JK53): RJ11 6 position

Pin No.	Function	Description
1	+5V_AUX	VCC
2	RXD	Data receiving pin of RS-232 interface
3	FG	Common FG for signal
4	TXD	Data transmitting pin of RS-232 interface
5,6	NC	Not used

❁ PMbus Connector Pin No. Assignment (JK51) & Extension Cards(PMBus (JK900,JK901)): RJ45 8 positions

Pin No.	Function	Description
1,2,3,5,9, 10,11,13	NC	Not use
4,12	CONTROL	Remote ON/OFF control pin (Note)
6,14	SDA	Serial Data used in the PMBus interface (Note)
7,15	SCL	Serial Clock used in the PMBus interface (Note)
8,16	FG	Common FG for signal

Note: Isolated signal, with FG as reference

❁ CANbus Connector Pin No. Assignment (JK52) & Extension Cards(CANBus (JK600,JK601)): RJ45 8 positions

Pin No.	Function	Description
1,2,3,5,9, 10,11,13	NC	Not use
4,12	CONTROL	Remote ON/OFF control pin (Note)
6,14	CAN-H	CAN-H used in the CAN Bus interface (Note)
7,15	CAN-L	CAN-L used in the CAN Bus interface (Note)
8,16	FG	Common FG for signal

Note: Isolated signal, with FG as reference

❁ Ethernet Connector Pin No. Assignment (JK22): RJ45 8 position

Pin No.	Function	Description
1	TX+	
2	TX-	Transmit data used in the Ethernet interface
3	RX+	Receive data used in the Ethernet interface
4,5,7,8	FG	Common FG for signal
6	RX-	Receive data used in the Ethernet interface

❁ Extension Cards(RS-232(CN891))

Pin No.	Function	Description
1,4,6,7,8,9	NC	Not used
2	RXD	Data receiving pin of RS-232 interface
3	TXD	Data transmitting pin of RS-232 interface
4	GND-FG	RS-232 common GND. This signal connects to FG and isolated from -V and GND-AUX

※ Extension Cards(USB(JK880,JK881)): USB A Type

Pin No.	Function	Description
1	+5V_AUX	VCC / max. 0.5A
2	D-	Data-
3	D+	Data+
4	FG	Common FG for signal

Table for functionality of connectors

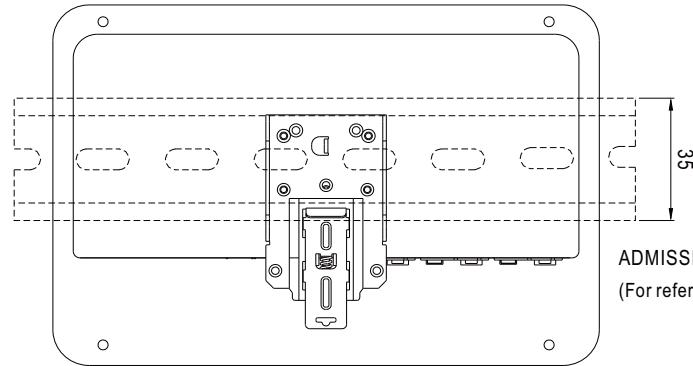
Model	TB30	TB51	CN36	CN37	CN38	CN39	JK51	JK52	JK53	JK22
CMU2A-#R# (Optional)	✓	X	X	X	X	X	X	✓	X	✓
CMU2C-P##	✓	X	X	X	✓	✓	✓	X	X	✓
CMU2C-R-P##	✓	X	X	X	✓	✓	✓	X	X	✓
CMU2C-C##	✓	X	X	X	✓	✓	X	✓	X	✓
CMU2C-R-C##	✓	X	X	X	✓	✓	X	✓	X	✓

✓: Functional

X: Not functional

Installation Instruction

① Din Rail

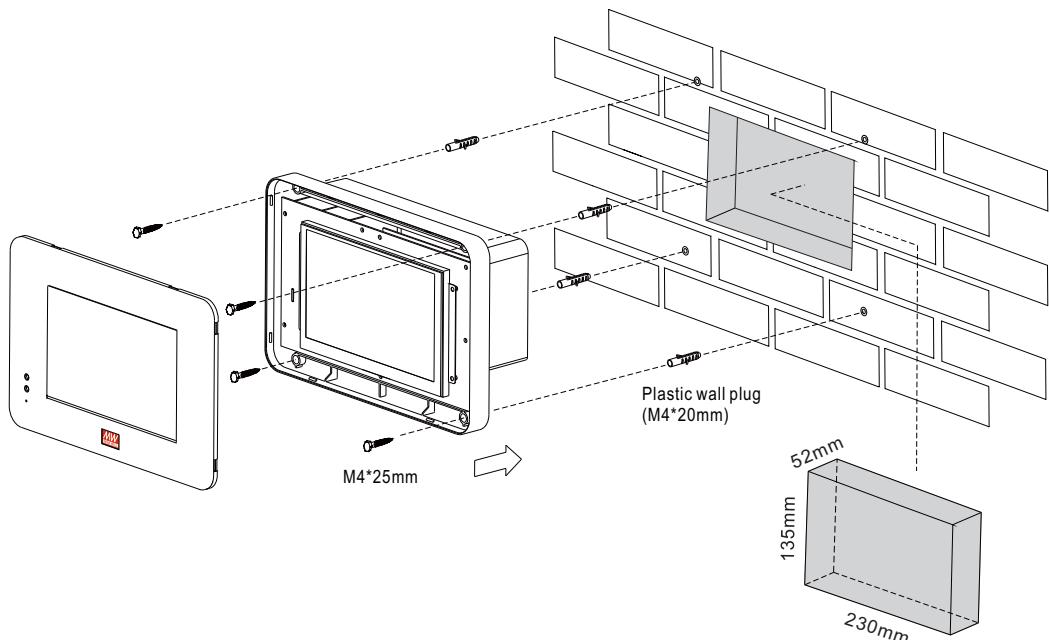


This series fits DIN rail TS35/7.5 or TS35/15.
For installation details, please refer to the Instruction manual.

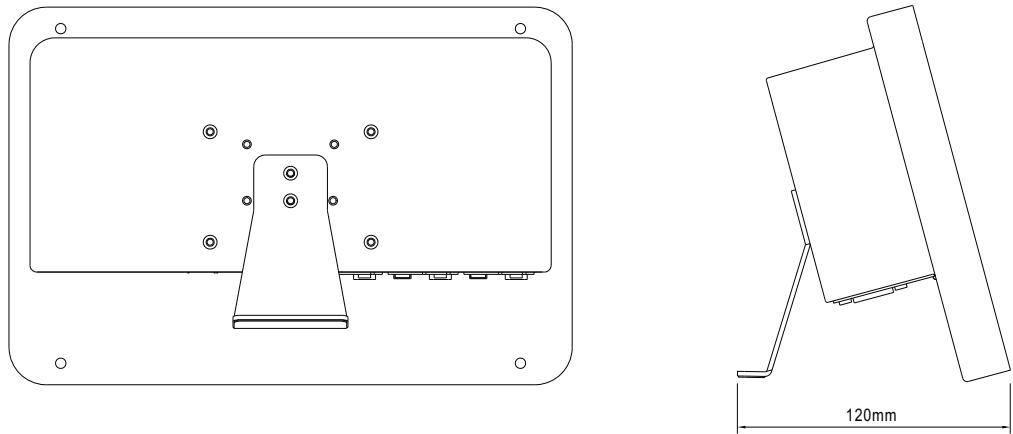
ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15
(For reference only. Not included with unit.)

Back View

② Wallhanging

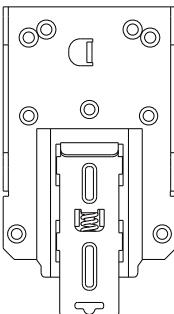
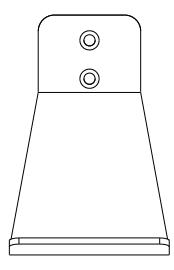
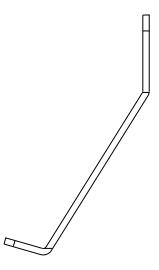


③ Desktop



■ Accessory List

Accessories are included in corresponding models

①	1GG2DRP14A		
②	1GG2MHS094		

■ TYPICAL APPLICATION