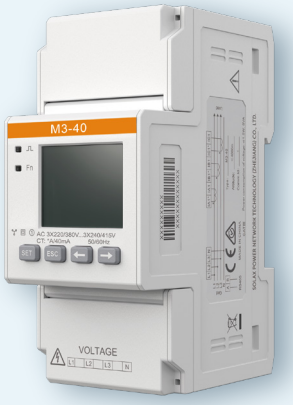
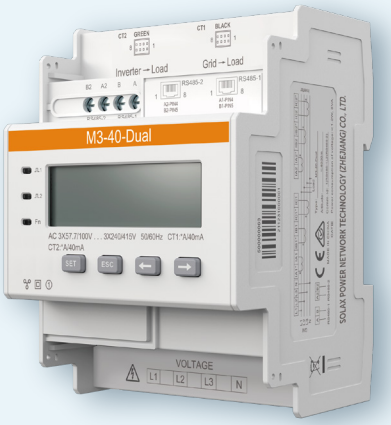
Accessories



M1-40



M3-40



M3-40-Dual

- Plug-and-play CT solution for easy installation
- Supports remote settings via SolaX Cloud APP
- 50ms high refresh rate for more precise and faster control
- Separates strong and weak currents for enhanced security
- Intelligent phase sequence and CT direction adjustment, automatically resolving installation issues
- Capable of monitoring power from both the grid and third-party inverters simultaneously*

** supported only by the two-curcuit model: M3-40-Dual*

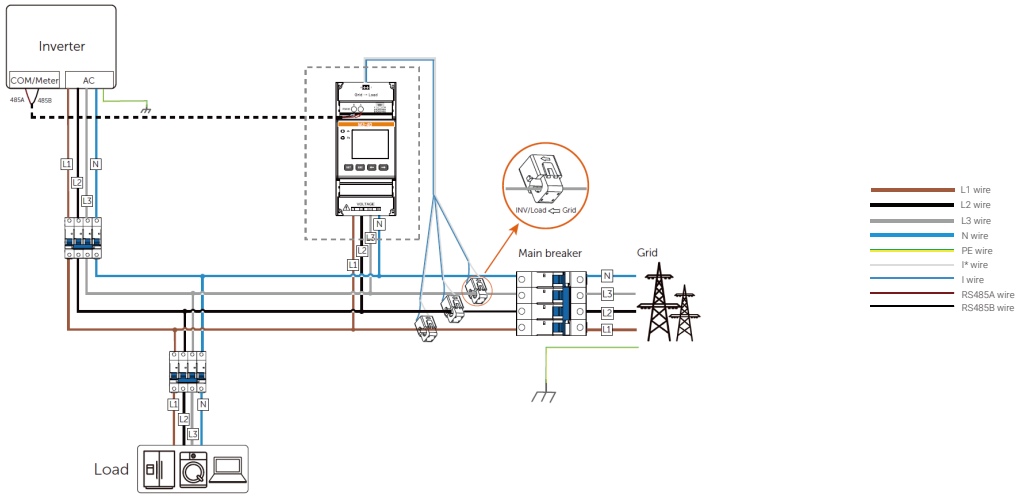
V1.6. Information may be subject to modify without notice. 650.00079.00

	M1-40	M3-40	M3-40-Dual
Power grid type	1P2W	3P3W / 3P4W	
Rated voltage	220 V ~ 240 V	3 × 220 / 380 V ~ 3 × 240 / 415 V	3 × 57.7 / 100 V ~ 3 × 240 / 415 V
Operating voltage	100 V~288 V	100 V ~ 280 V	50 V ~ 480 V
Current	*A / 40 mA		
Recommended CT specification	100 A / 40 mA	100 A / 40 mA, 200 A / 40 mA, 400 A / 40 mA, 600 A / 40 mA	
Recommended rogowski coil specification	/	1000A / 40 mA, 1500A / 40mA, 2000 A / 40 mA, 3000 A / 40 mA①	
Power consumption	< 1.2 W	< 1.5 W	< 1.2 W
Measurement accuracy class	Voltage and current: Class 0.5 Active power: Class 1 Reactive power: Class 2		
Resolution requirement	Active power: 0.1 W Frequency: 0.001 Hz		
Frequency	45 Hz ~ 65 Hz		
Frequency tolerance	0.01 Hz		
Operating temperature	-40°C~70°C		
Operating humidity	≤ 95% RH (non-condensing)		
Operating altitude	< 4000 m		
Degree of protection	IP20		
Dimensions (W x H x D)	18 mm × 100 mm × 65.5 mm	45 mm × 100 mm × 65.5 mm	72 mm × 100 mm × 65.5 mm

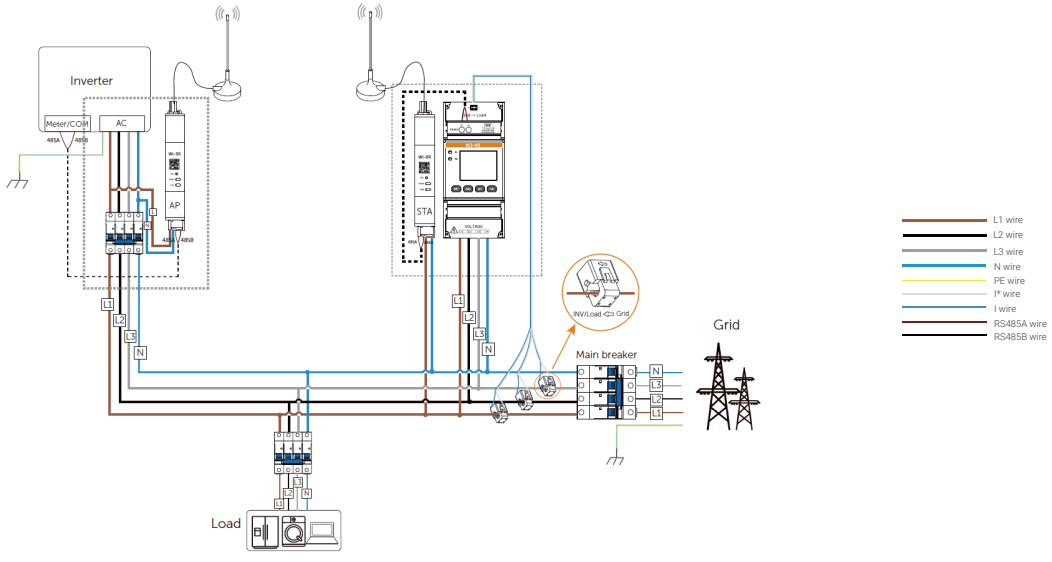
① The old firmware of the SolaX three-phase meter does not support compatibility with the 3000A Rogowski coil and requires a remote upgrade.

Solutions

M3-40
Networking through RS485 cable



M3-40
Wireless data transmission through Wi-BR









SolaX Meter

M1-40/M3-40/M3-40-Dual

User Manual

Version 1.0

www.solaxpower.com

eManual in the QR code or
at http://kb.solaxpower.com/

4 Unpacking and Inspection

4.1 Unpacking

These meters are well protected with plastic foams and packages upon delivery. However, damages may still occur during transportation. Upon acceptance, please verify the meter model, and carefully check the meter appearance for any sign of damages, such as punctures or cracks. If any damage is found, contact your supplier immediately.

4.2 Scope of Delivery

Accessories of each meter model are specified below. After unpacking, check the items against the packing list. If there is any part damaged or missing, contact your supplier.

M1-40

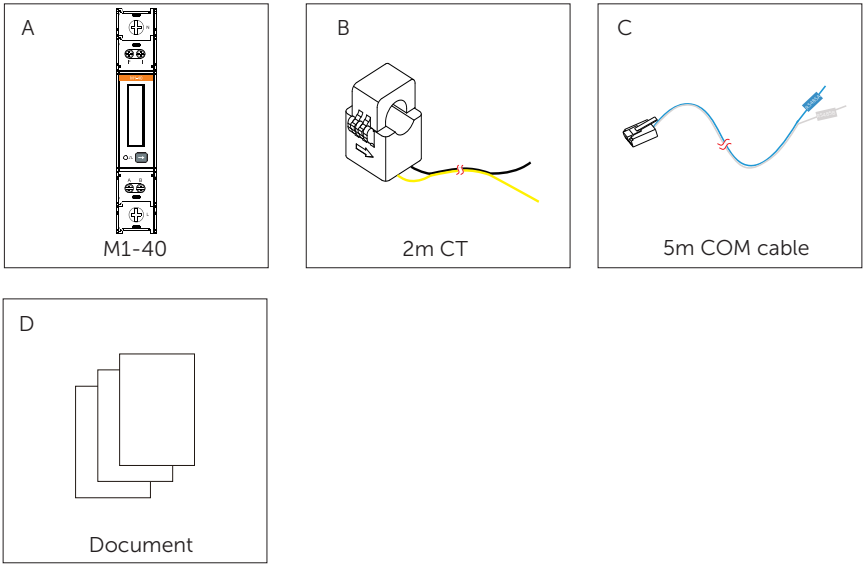


Figure 4-1 Packing list of M1-40

Table 4-1 Packing list of M1-40

No.	Item	Quantity	Remarks
A	M1-40	1	/
B	CT with 2m cable	1	/
C	5m communication cable with an RJ45 connector	1	For connecting inverters and Wi-BR
D	Document	/	/

M3-40

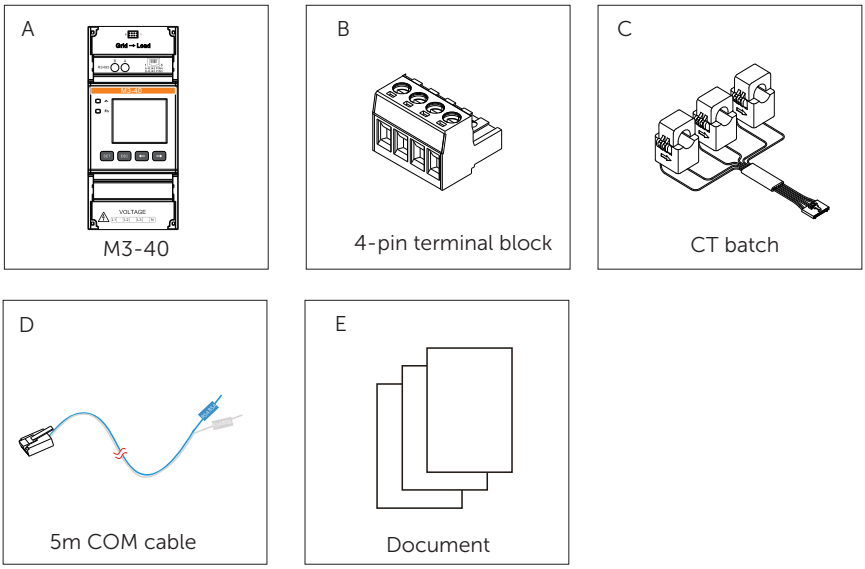


Figure 4-2 Packing list of M3-40

Table 4-2 Packing list of M3-40

No.	Item	Quantity	Remarks
A	M3-40	1	/
B	4-pin terminal block	1	For connecting the power cables
C	CT batch	1	/

No.	Item	Quantity	Remarks
D	5m communication cable with an RJ45 connector	1	For connecting inverters and Wi-BR
E	Document	/	/

M3-40-Dual

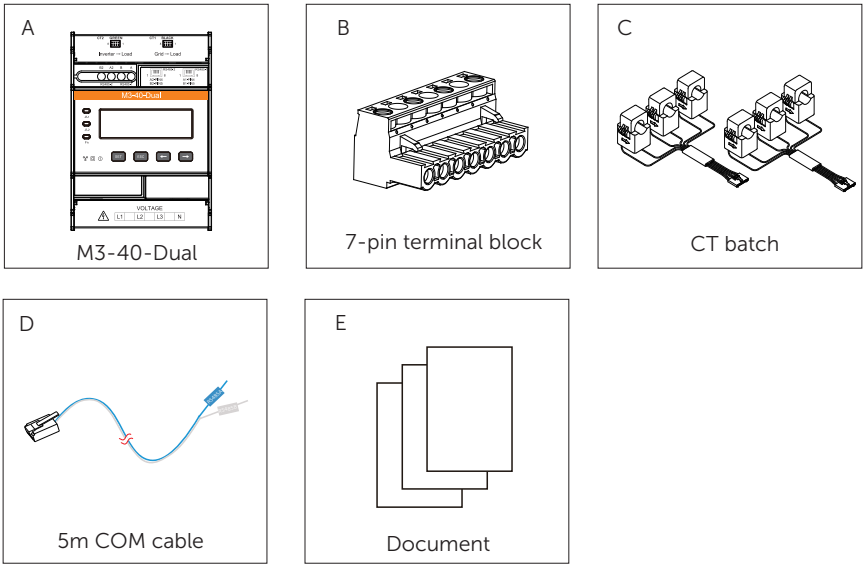


Figure 4-3 Packing list of M3-40-Dual

Table 4-3 Packing list of M3-40-Dual

No.	Item	Quantity	Remarks
A	M3-40-Dual	1	/
B	7-pin terminal block	1	For connecting the power cables
C	CT batch	2	/

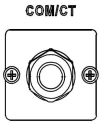
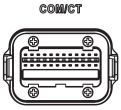
10 Technical Data

Model	M1-40	M3-40	M3-40-Dual
Power grid type	1P2W	3P3W/3P4W	3P3W/3P4W
Rated voltage	220V...240V	3*220/380V...3*240/415V	3*57.7/100V...3*240/415V
Operating voltage	100 V~288 V	100 V~280 V	50 V~480 V
Current	*A/40 mA		
Recommended CT specification	100 A/40 mA; 200 A/40 mA	100 A/40 mA; 200 A/40 mA; 400 A/40 mA; 600 A/40 mA; 1000 A/40 mA;	
Power consumption	<1.2 W		
Measurement accuracyclass	Voltage and current: Class 0.5		
	Active power: Class 1		
	Reactive power: Class 2		
Resolution requirement	Active power: 0.1 W		
	Frequency: 0.001 Hz		
Frequency	45 Hz~65 Hz		
Frequency tolerance	0.01 Hz		
Operating temperature	-40°C to +70°C		
Operating humidity	≤95% , non-condensing		
Operating altitude	<4000 m		
Degree of protection	IP20		
Dimensions (mm) (W × H × D)	18 × 100 × 65.5	45 × 100 × 65.5	72 × 100 × 65.5

11 Appendix

M1-40

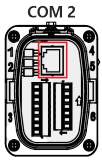
can only be connected to single-phase inverters. It is compatible with the following single-phase inverters. While connecting the cables, pay special attention to the connector type and the pin number of the inverter.

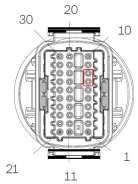
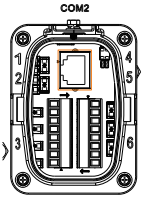
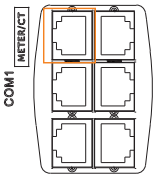
Inverter series	Terminal type	Connector type	Pin No.	Pin definition	Remarks
X1-HYB LV		RJ45	4 5	485A 485B	Select either COM1, COM2 or COM3
X1-AC		RJ45	7 8	485A 485B	—
• X1-HYB G4 • X1-FIT G4 • X1-IES • X1-VAST		RJ45	4 5	485A 485B	—
• X1-MINI G4 • X1-BOOST G4		RJ45	4 5	485A 485B	—
X1-SMART G2		Quick-connect terminal	4 / 11 5 / 12	485A 485B	—

*Note: Two pairs of terminals are available for meter connection on X1-Smart G2, and the pins in the same box are a pair.

M3-40&M3-40-Dual

M3-40 and M3-40-Dual can be connected to both single-phase and three-phase inverters. Therefore, besides the above the single-phase inverters, it is also compatible with the following three-phase inverters.

Inverter series	Terminal Type	Connector type	Pin No.	Pin definition
• X3-HYB G4 • X3-FIT G4 • X3-IES • X3-HYB G4 PRO	 Meter/CT	RJ45	4	485A
			5	485B
X3-ULTRA		RJ45	4	485A
			5	485B
X3-MIC G2		RJ45	4	485A
			5	485B
X3-PRO G2		O/I terminal	5	485A
			6	485B

Inverter series	Terminal Type	Connector type	Pin No.	Pin definition
• X3-MEGA G2 • X3-FORTH		Quick-connect terminal	7	485A
			8	485B
X3-AELIO		RJ45	4	485A
			5	485B
X3-HYB G4 PRO		RJ45	4	485A
			5	485B