EPM
Field Solutions

EPM solutions

Solution 1: Onsite grid is single-phase, and no weather meter, meter and other equipment access requirements.

Solution 2: Onsite gird is three-phase, and there is no weather meter and other equipment access requirements.

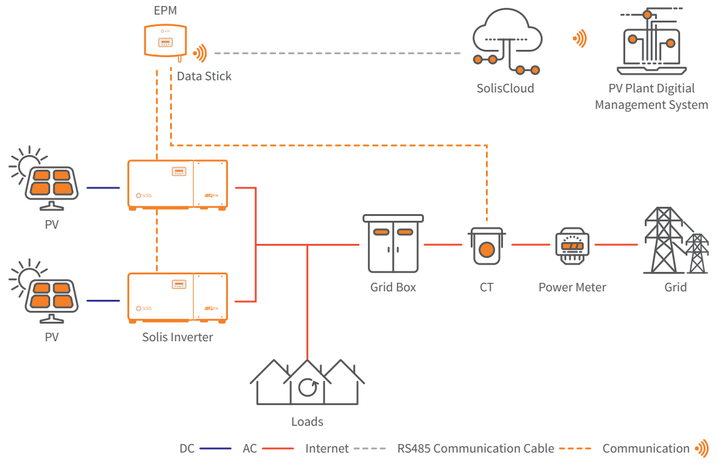
Solution 3: Onsite gird is three-phase, and need to use the meter to choose the third option.

Solution 4: There is three phase grid on the sit and it need to connect with weather station or third-part device. The number of inverters is less than or equal to 45 units.

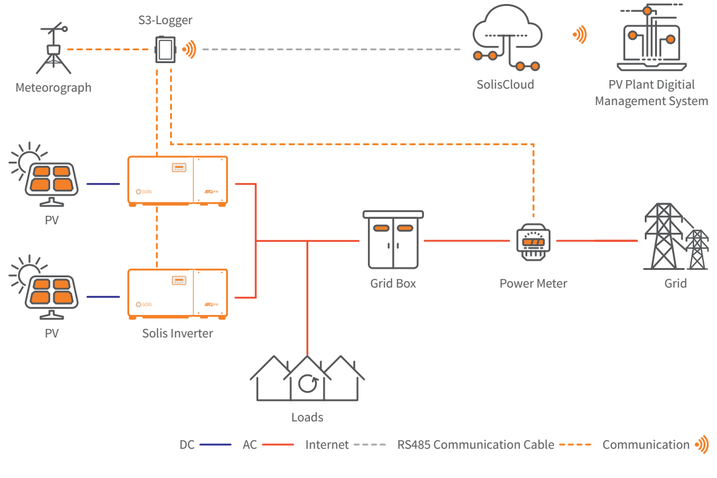
Solution 5: There is three phase grid on the sit and it need to connect with weather station or third-part device. The number of inverters is less than or equal to 105 units.

EPM Solutions	Solution 1	Solution 2	Solution 3	Solution 4	Solution 5
Device Model	Solis-EPM1-5G	Solis-EPM3-5G	Solis-EPM3-5G-PRO	S3-Logger + Meter	G3-Gateway + Meter
Supply Voltage	110-300V	175-520V	175-520V	100-240V	100-240V
COM	/	/	/	4	8
Inverter Number	≤10 Units	≤60 Units	≤60 Units	Each COM port≤15 Units	Each COM port≤15 Units
Grid Electrical Parameters					
Rated Voltage	220V/230V/240V	400V/480V	400V/480V	N/A	N/A
Single phase	√	×	×	√	√
Three phase	×	√	√	√	√
Communication Method					
Inverter	RS485	RS485	RS485	RS485	RS485
SolisCloud	External Data logging Stick	External Data logging Stick	External Data logging Stick	No need external devices	No need external devices
Extended Functions					
Weather Station	×	×	×	√	√
Meter	×	×	√ (Built-in Meter)	√	√
Others					
Solution Diagram	Diagram 1	Diagram 1	Diagram 3-1 / 3-2	Diagram 2	Diagram 2
Note	/	/	Need the site to have PT and CT for the grid connection point		

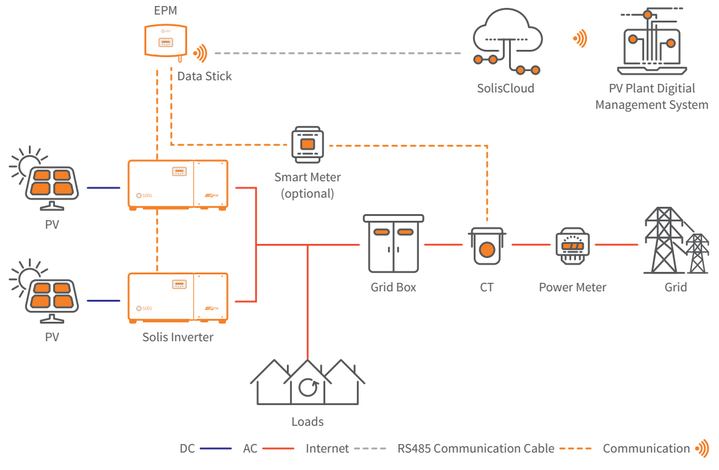
Solution Diagram 1 (Solution 1 & Solution 2)



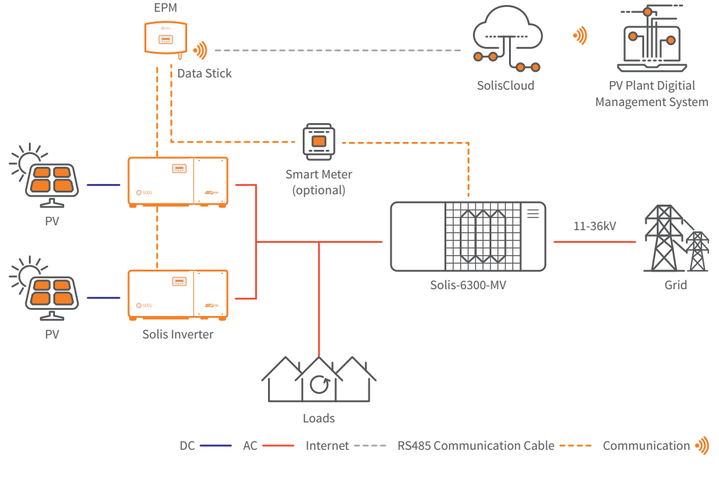
Solution Diagram 2 (Solution 4 & Solution 5)



Solution Diagram 3-1 (Solution 3)



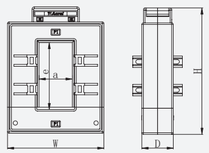
Solution Diagram 3-2 (Solution 3)



DATASHEET Solis-EPM-5G

Models	Solis-EPM1-5G	Solis-EPM3-5G	Solis-EPM3-5G-PRO
Input AC			
Rated voltage	1/N/PE, 230 V	3/N/PE, 230 V / 400 V	
Input voltage range	110 ~ 300 V (L-N)	175 ~ 519 V (L-L)	
Input frequency range	45~65 Hz		
Communication			
Inverter communication	Modbus		
Communication with inverter	RS485 (Wired)		
Max. communication inverter numbers	10	60 (1)	
Max. communication distance	1000 m		
Monitoring	WiFi/4G/LAN Stick (Optional)		
General Data			
Operating ambient temperature range	-25 ~ +60℃		
Relative humidity	5%~95%		
Max. operation altitude	2000 m		
Ingress protection	IP65		
Pollution degree	PD2 (Inside), PD3 (Outside)		
Overvoltage category	III		
Self-consumption	<6 W		
Dimensions (W*H*D)	364*276*114 mm		
Weight	2.1 kg (without CT, Meter)		
AC connection	Quick connection terminal		
Display	LCD		
Smart meter	No		Yes
CT connection	Plug terminal		
CT specification	Optional (Secondary current is 5A) (2)		
Power control accuracy	1%		
Features			
Failsafe fuction	Yes		
Remote upgrated	Yes		
Control time	5 s		

CT specification



Specification	Dimensions (mm)			Hole size (mm)		Ratio
	W	H	D	a	e	
CT-30×20-100 A	90	114	40	22	32	100:5 A
CT-60×40-300 A	114	140	36	42	62	300:5 A
CT-80×40-600 A	122	162	40	42	82	600:5 A
CT-80×40-1000 A	122	162	40	42	82	1000:5 A
CT-160×80-2000 A	184	254	52	82	162	2000:5 A
CT-160×80-3000 A	184	254	52	82	162	3000:5 A

(1) The installed capacity of the inverter cannot exceed 5MW.

(2) Due to different on-site installation conditions, Solis currently has optional specifications as shown in the above table. It is suggested that the client can choose the appropriate CT specifications according to the actual installation requirements.

DATASHEET S3-Logger

Models	S3-Logger
Communication	
Supported device type	Solis inverter
Number of connected inverters (1)	Each RS485 PORT≤15
Data collection intervals	5 minutes
Status indicator	LED × 2, Power, Run
RS485	COM × 4, 1200~19200 bps, communication distance ≤1000 m
Ethernet communication	LAN × 1, 10/100Mbps adaptive, communication distance ≤100 m
Communication Protocol	
RS485	Modbus-RTU, IEC60870-5-103, DLT645
Ethernet	Modbus-TCP, IEC60870-5-104
Electrical	
AC power supply	100~240 V, 50 Hz / 60 Hz
DC power supply	9~36 V
Operating power consumption	5 W@12VDC
Environment	
Operating temperature	-40 ~ +80℃
Operating humidity	≤85%, Relative humidity, no condensa
Storage temperature	-40 ~ +80℃
Max. operation altitude	4000 m
Mechanical	
Dimensions (L*W*H)	89*121*27 mm
Protection degree	IP20
Installation method	Rail Mounting, Desktop installation
Others	
Certification	CE, RoHS

(1) Connect the inverters by RS485 cables.

DATASHEET G3-Gateway

Models	G3-Gateway
Communication	
Supported device type	Solis inverter
Number of connected inverters (1)	Each RS485 PORT≤15
Data collection intervals	5 minutes
RS485	COM × 8, 1200~19200 bps, communication distance ≤1000 m
Ethernet communication	LAN × 2, 10/100 Mbps adaptive, communication distance ≤100 m
Communication Protocol	
RS485	Modbus-RTU, IEC60870-5-103, DLT645
Ethernet	Modbus-TCP, IEC60870-5-104
Electrical	
AC power supply	100~240 V, 50 Hz / 60 Hz
DC power supply	9~36 V
Operating power consumption	5 W@12VDC
Environment	
Operating temperature	-40 ~ +80℃
Storage temperature	-40 ~ +80℃
Operating humidity	≤85%, Relative humidity, no condensa
Max. operation altitude	4000 m
Mechaical	
Dimensions (L*W*H)	121*54*200 mm
Protection degree	IP20
Installation method	Rail Mounting, Desktop installation
Others	
Certification	CE, RoHS

(1) Connect the inverters by RS485 cables.