INTEG-R Smart Meter and CT Introduction

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01
Introduction

Highlights

- 7X24H load power consumption monitoring*
- Accurate export limitation and control
- High current measurement precision
- High compatibility for grid type
- OLED display and physical buttons for easy use
- Communication with RS485, WiFi/LAN(RMK only)
- Easy installation with DIN35mm rail

*: RMM with hybrid inverter or RMK with on-grid inverter only.

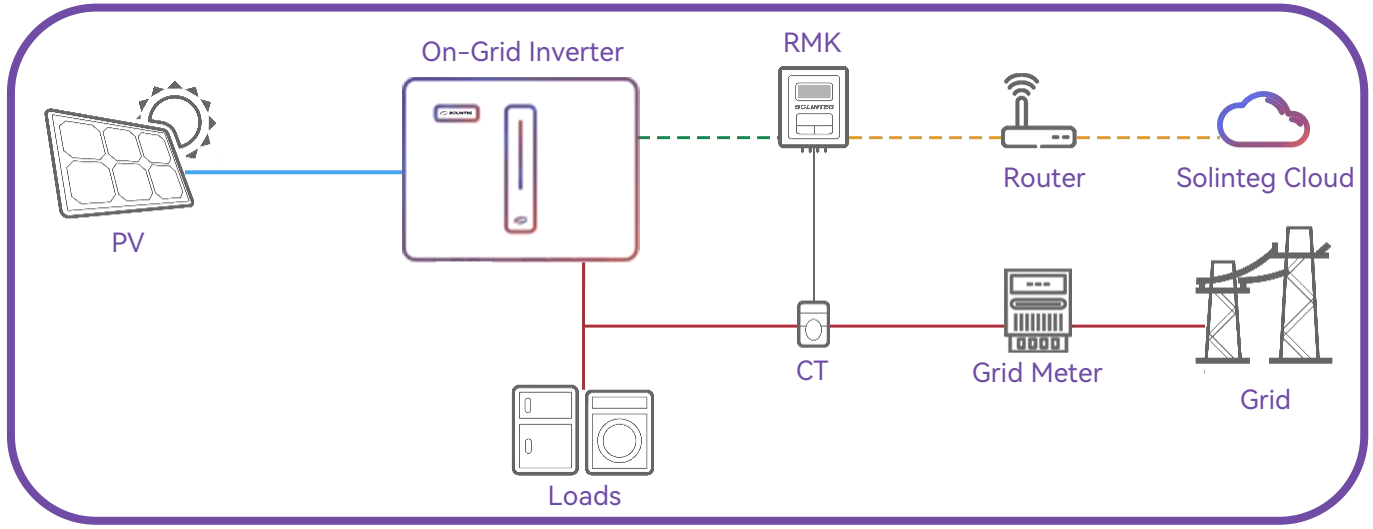
Main Function

24H Load Monitoring

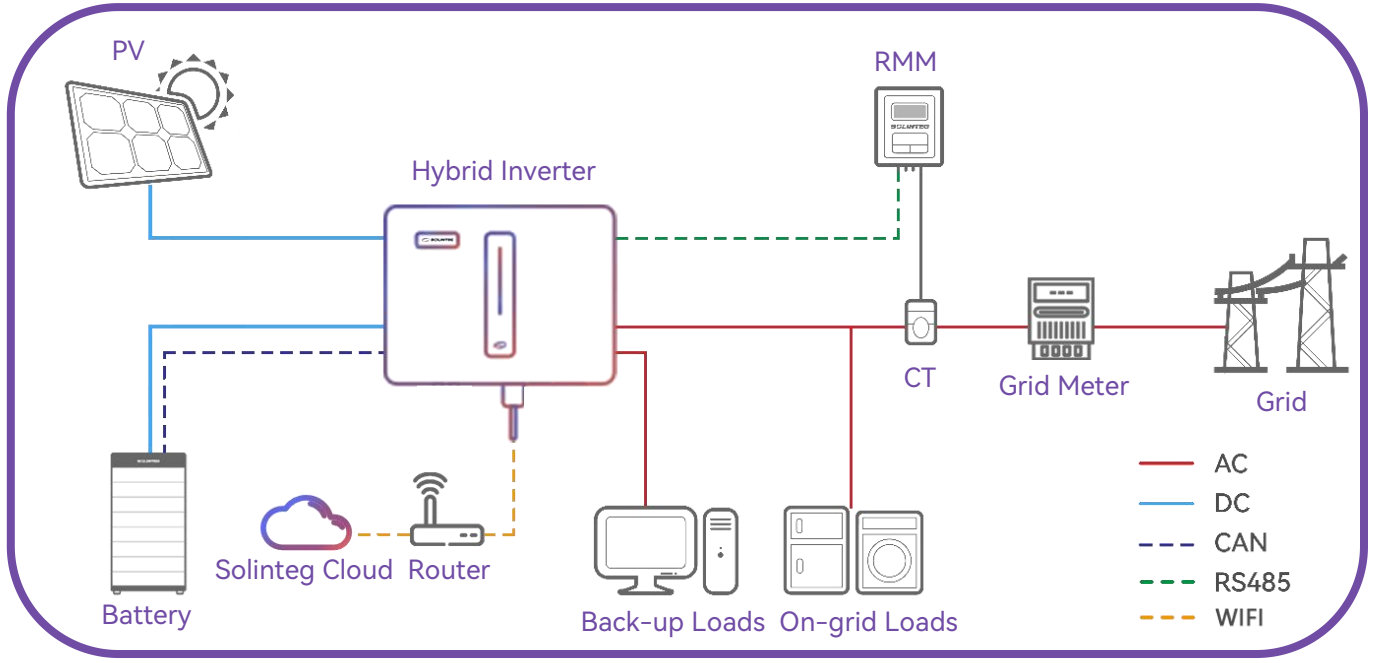
Export Limitation

Intelligent EMS

RMK & On-Grid



RMM & Hybrid



Key Parameters

MODEL	RMM-MA	RMK-MA	RMM-5A	RMK-5A
Signal and power input				
Rated Voltage	230/400V			
Rated Current (Secondary side)	≤ 100mA		≤ 5A	
Rated Frequency	50/60 Hz			
Sampling Current overload	Continue: 1.2 times; instantaneous: 2times / 10s			
Accuracy				
Current/Voltage	0.50%			
Frequency	±0.01Hz			
Power (Active /Reactive)	Class 0.5S			
General Data				
Display	OLED			
Communication	RS485	RS485, WiFi/LAN	RS485	RS485, WiFi/LAN
Self-consumption	< 5VA	< 7.5VA	< 5VA	< 7.5VA
Installation	35mm DIN Rail			
CT	With		Without	

Suitable for various grid 230-400V, Three-phase/Split-phase/Single-phase

0.5%

High precision level, accurate power control and limitation

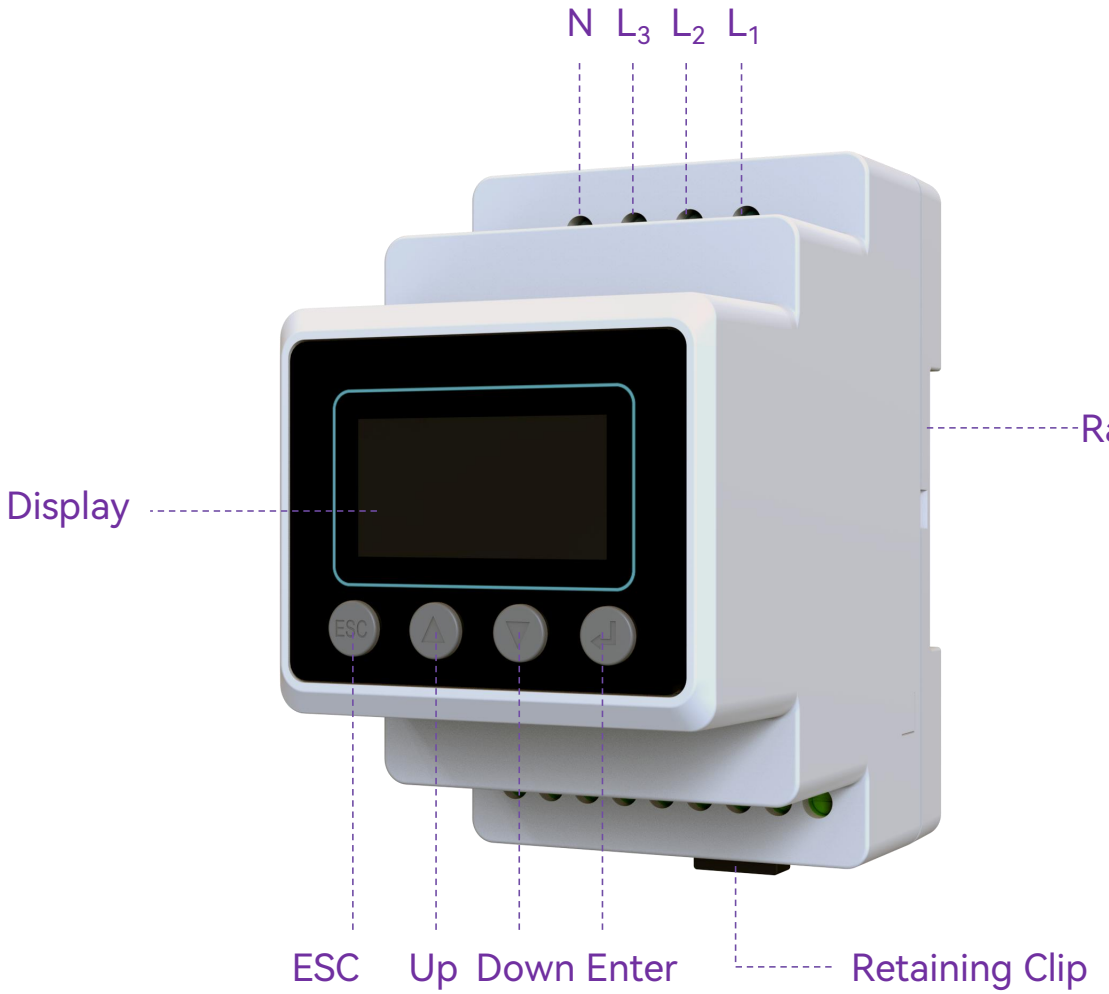
OLED display, multiple communication, easy to use and install

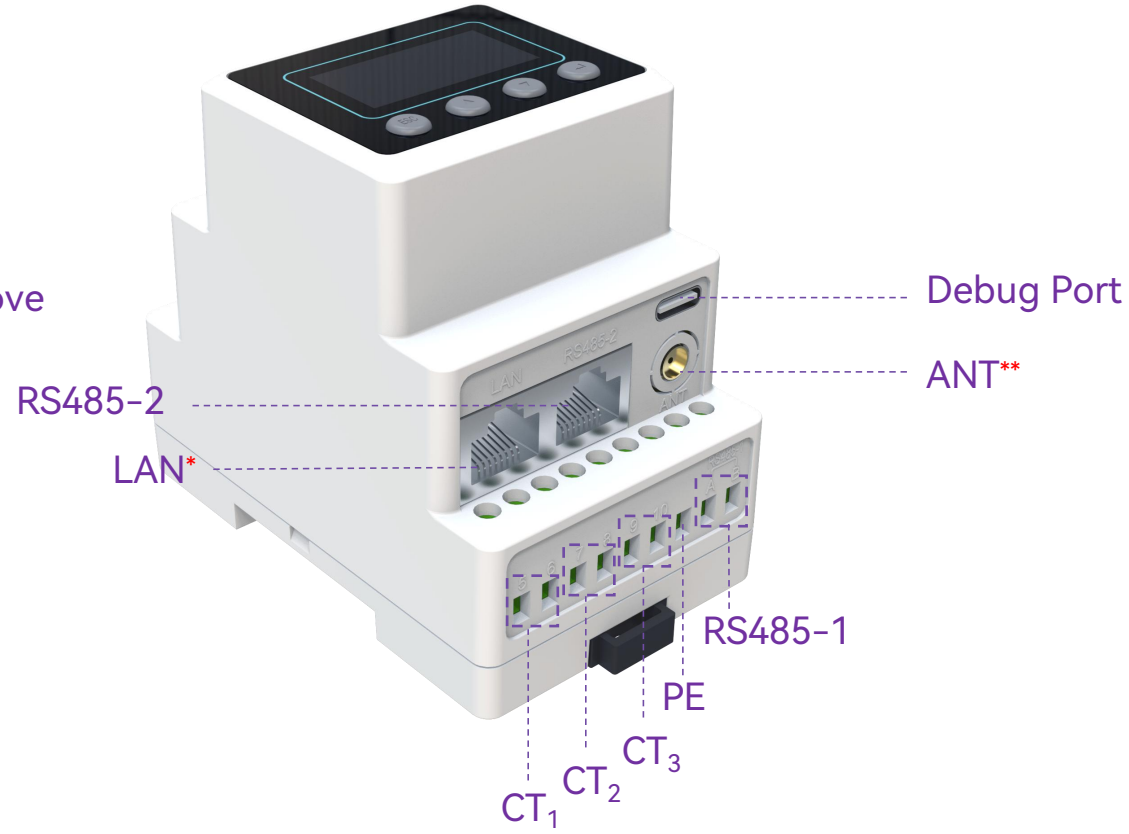
Comparison

	RMM	RMK
	Communication: RS485 **Self-consumption:** < 5VA **Applicable Series:** MHS, MHT, OGT	**Communication:** RS485, WiFi/LAN **Self-consumption:** < 7.5VA **Applicable Series:** OGS, OGT
	MA	**5A**
	CT: With, 120A/200A/300A optional **Rated Current:** ≤ 100mA	**CT:** Without, Self-purchase **Rated Current:** ≤ 5A

02
Appearance

Appearance





*: The LAN port does not function on the RMM series.
**: RMM series don't have ANT port.

Appearance —— MA Series

NOTE:

MA series are delivered with matched CT(s) *.

Each CT in each package is calibrated and tested, which cannot be interchanged with other CT within the same device or other devices.

Three CT sizes meet various demands:

Φ16 120A / Φ24 200A / Φ35 300A (optional)

Select the CT type according to the primary side current and wire diameter.

*: 5A series are not delivered with CT. CT purchase standard: secondary side output 5A, CT accuracy of 0.5, and maximum CT conversion ratio of 5000:5.

Appearance —— Screen

Communicated with inverter by RS485-1

Communicated with inverter by RS485-2

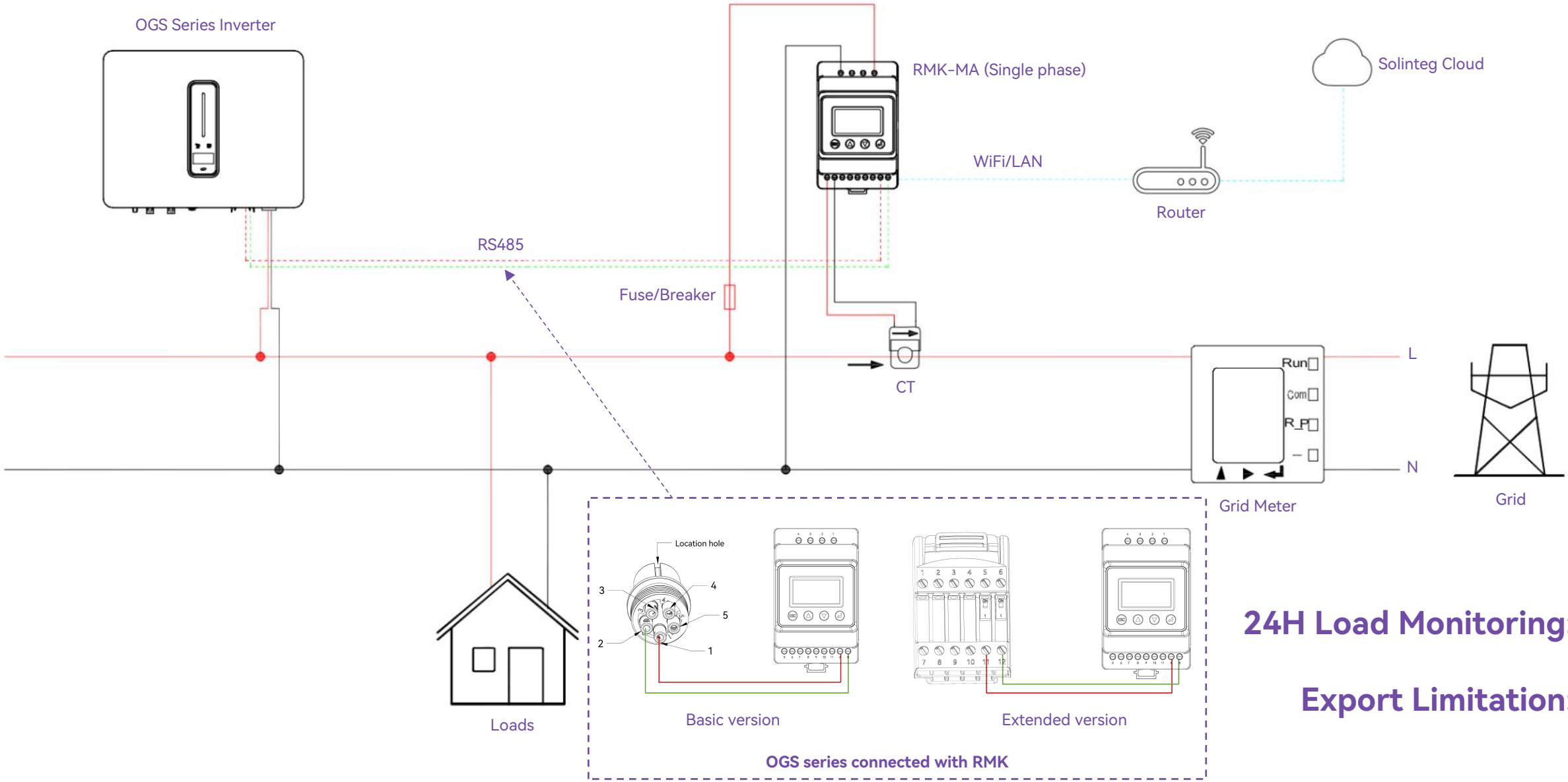
Network connection status

Communicated with server by WIFI

Communicated with server by LAN

03
Application

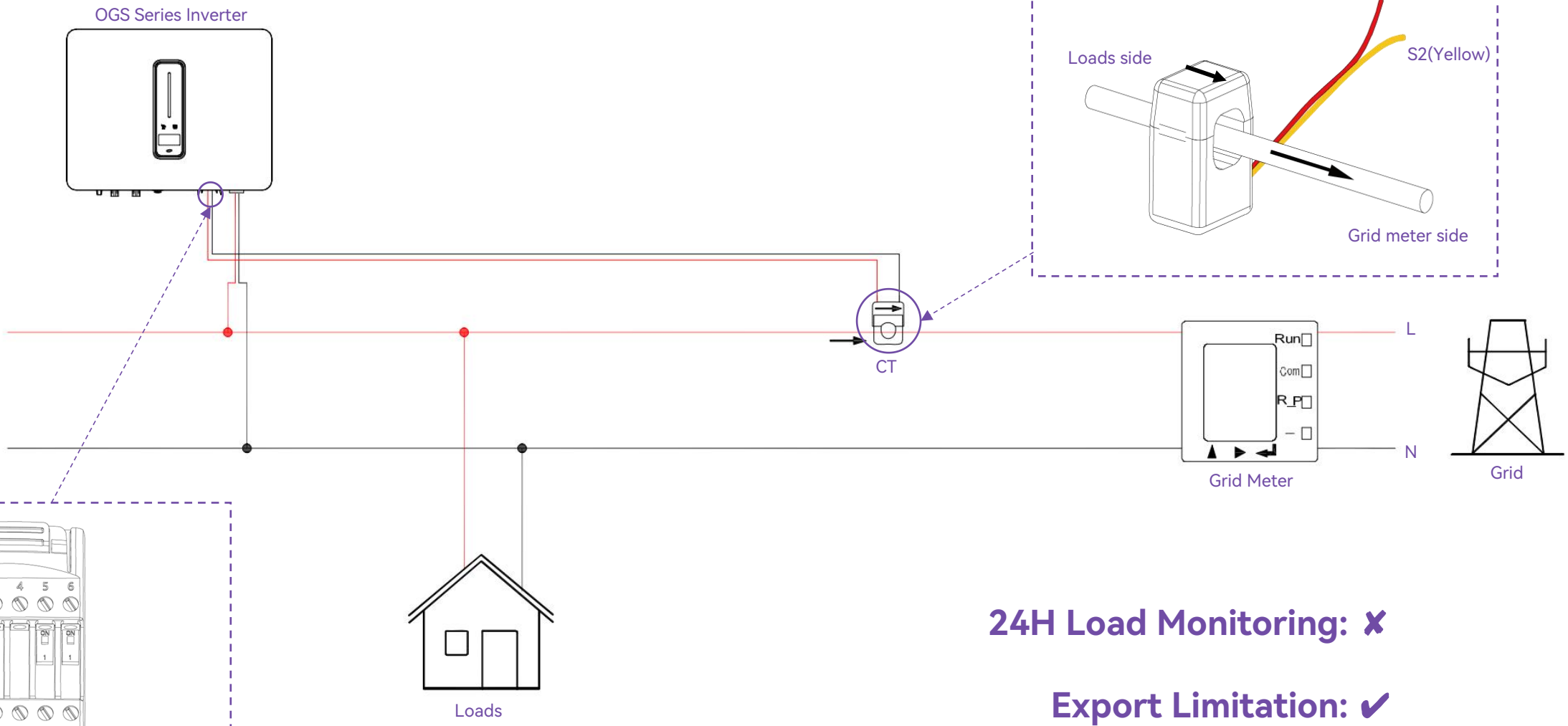
Application01 —— OGS Series with RMK



24H Load Monitoring: ✔

Export Limitation: ✔

Application02* —— OGS Series with CT

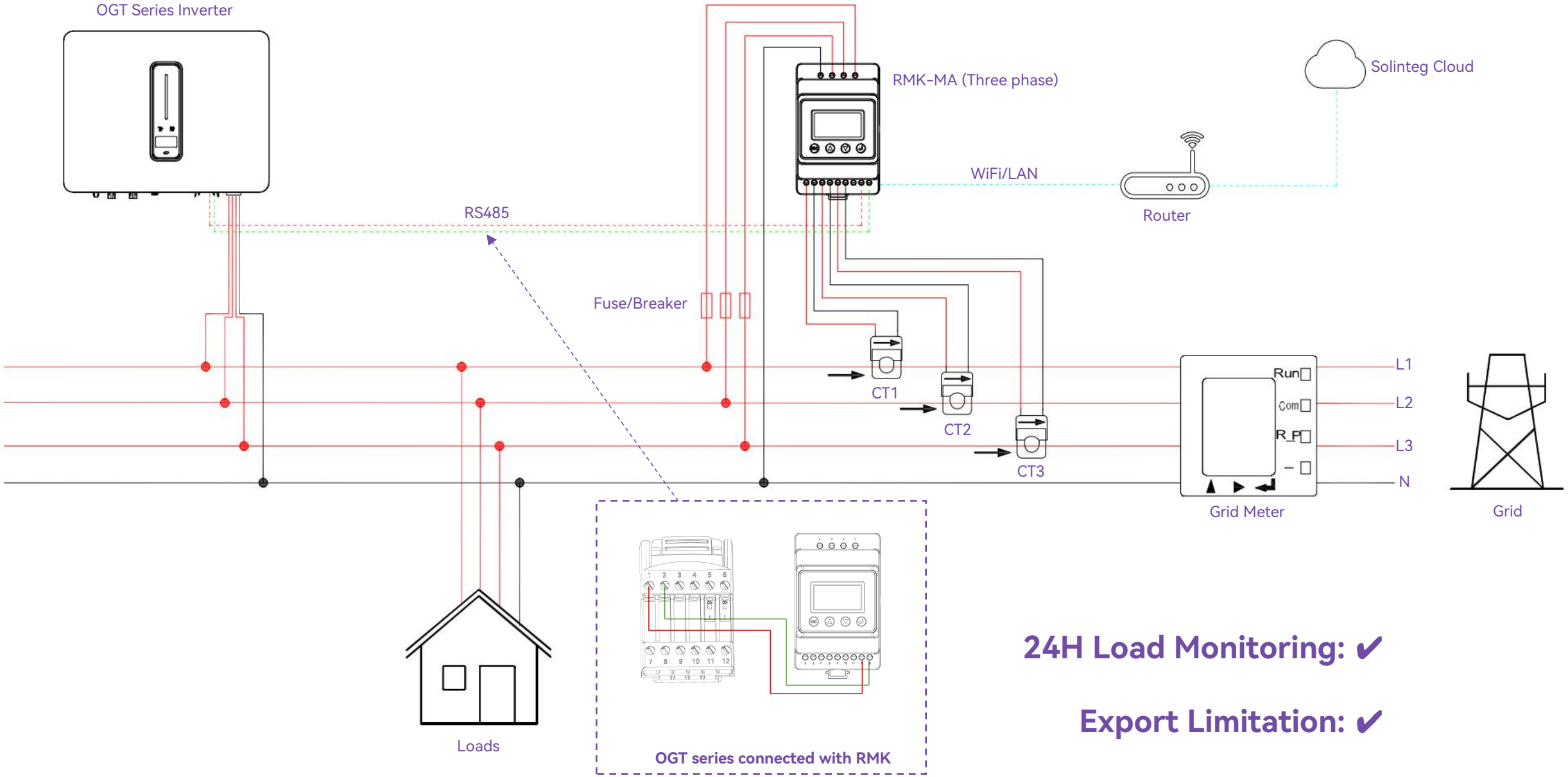


24H Load Monitoring: ✘

Export Limitation: ✔

*: OGS extended version only.

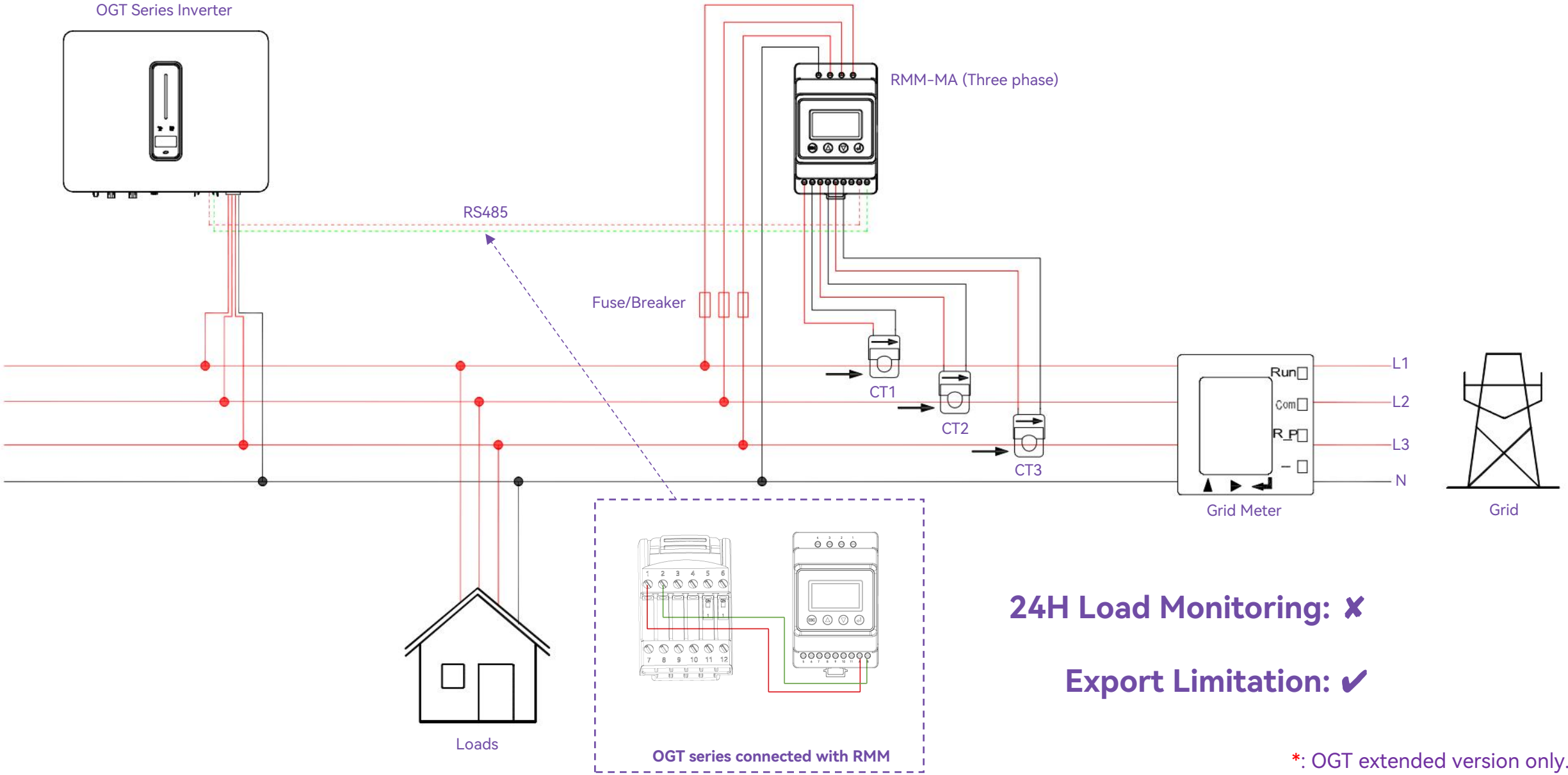
Application03 —— OGT Series with RMK



24H Load Monitoring: ✔

Export Limitation: ✔

Application04 —— OGT Series with RMM*

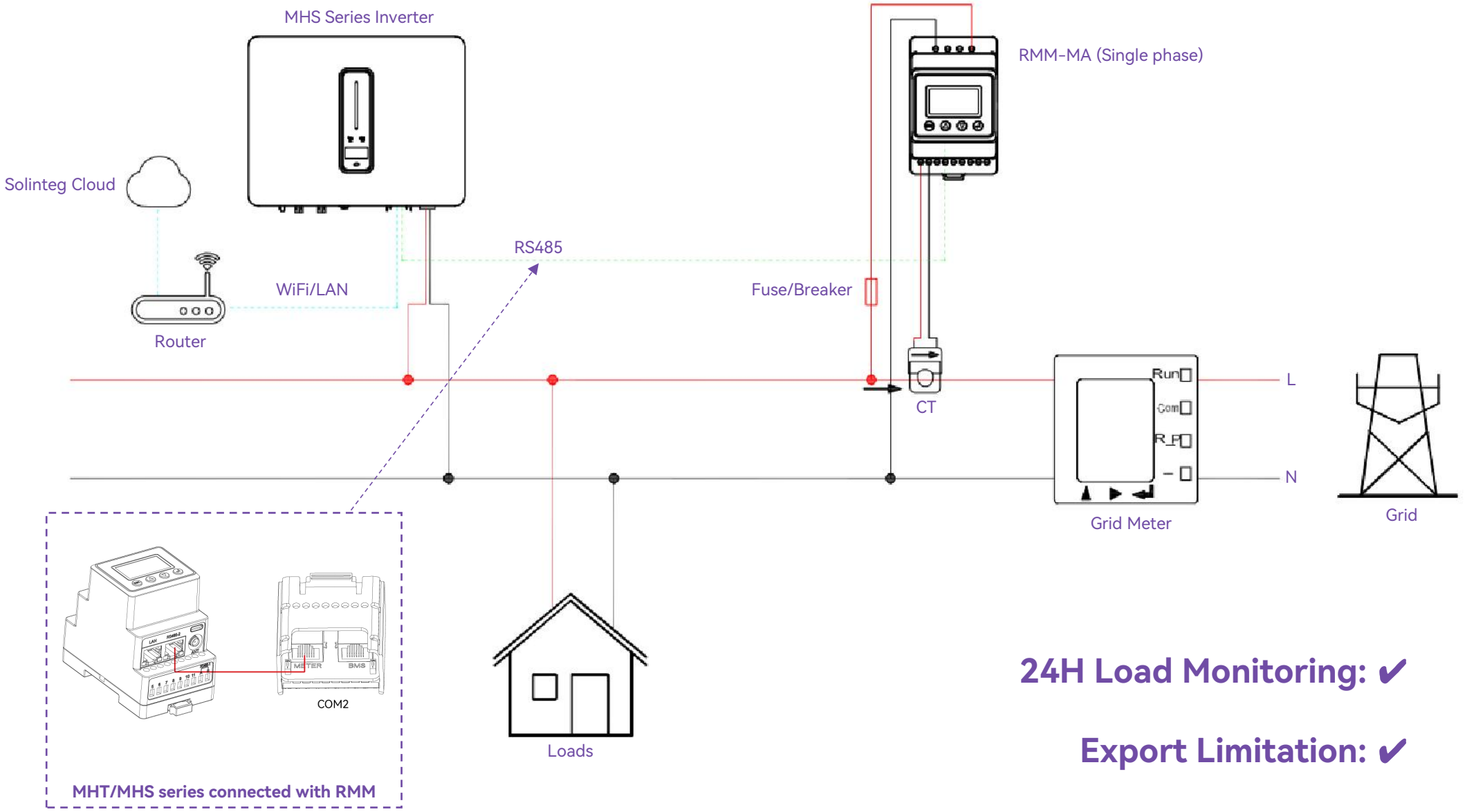


24H Load Monitoring: ✘

Export Limitation: ✔

*: OGT extended version only.

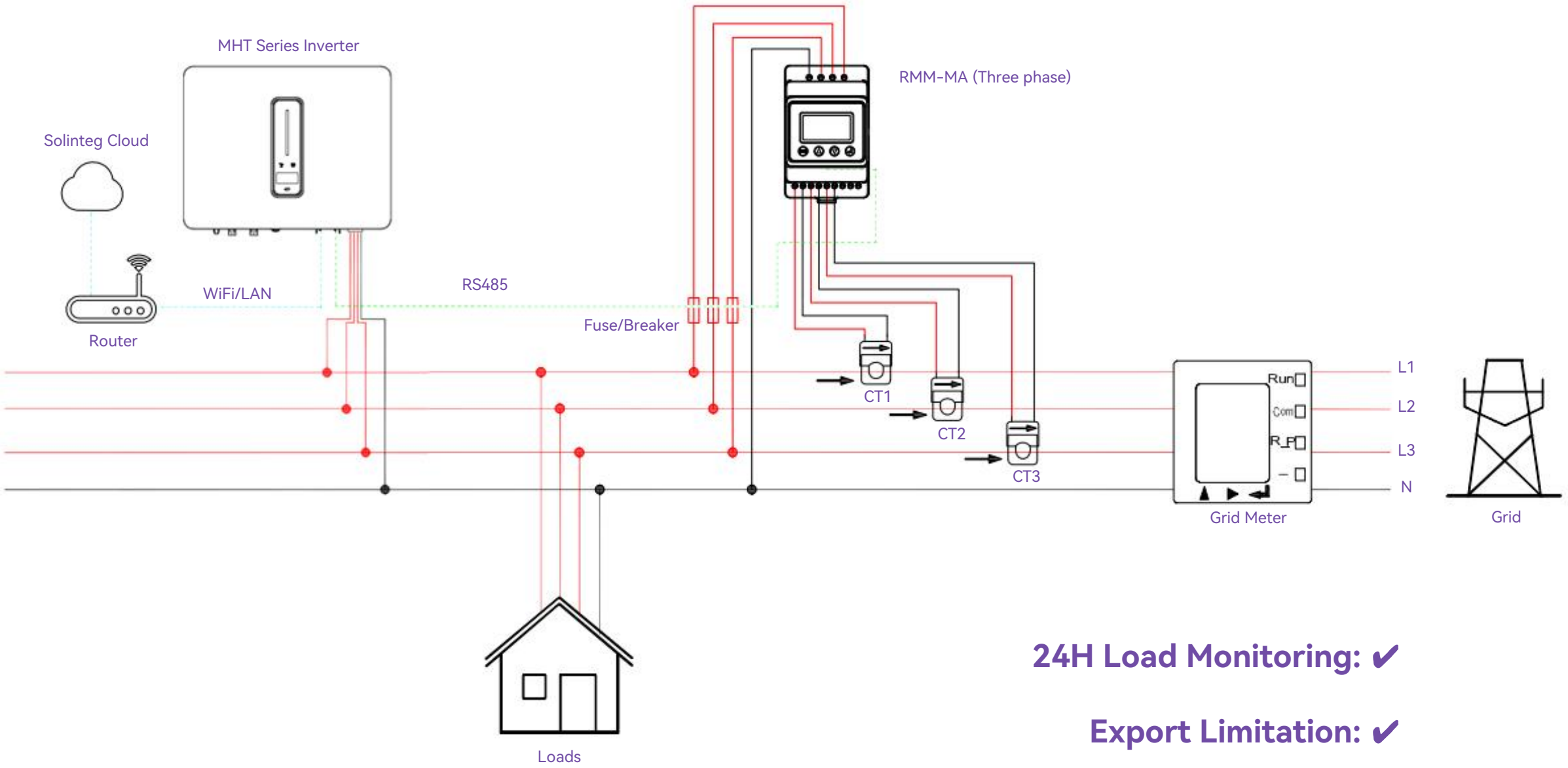
Application05 —— MHS Series with RMM



24H Load Monitoring: ✔

Export Limitation: ✔

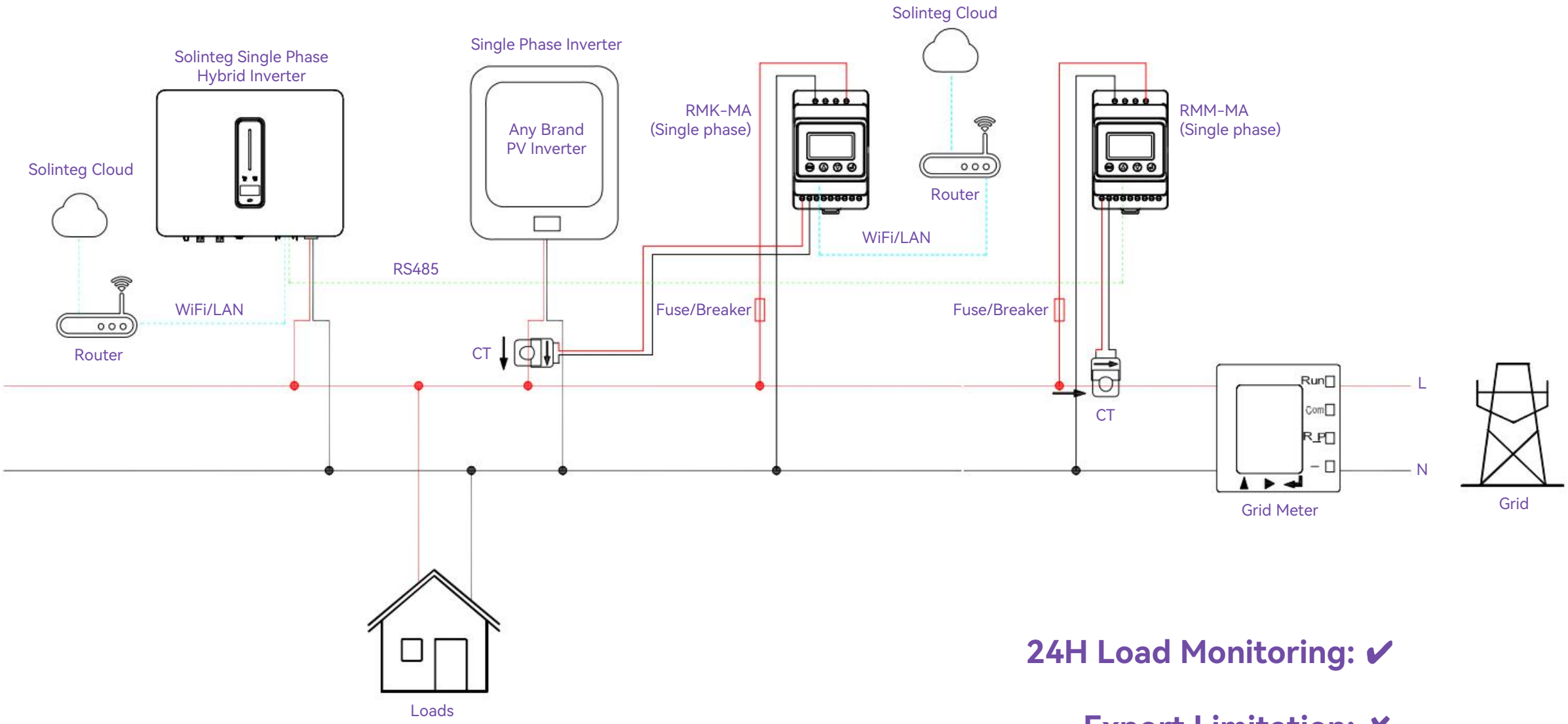
Application06 —— MHT Series with RMM



24H Load Monitoring: ✔

Export Limitation: ✔

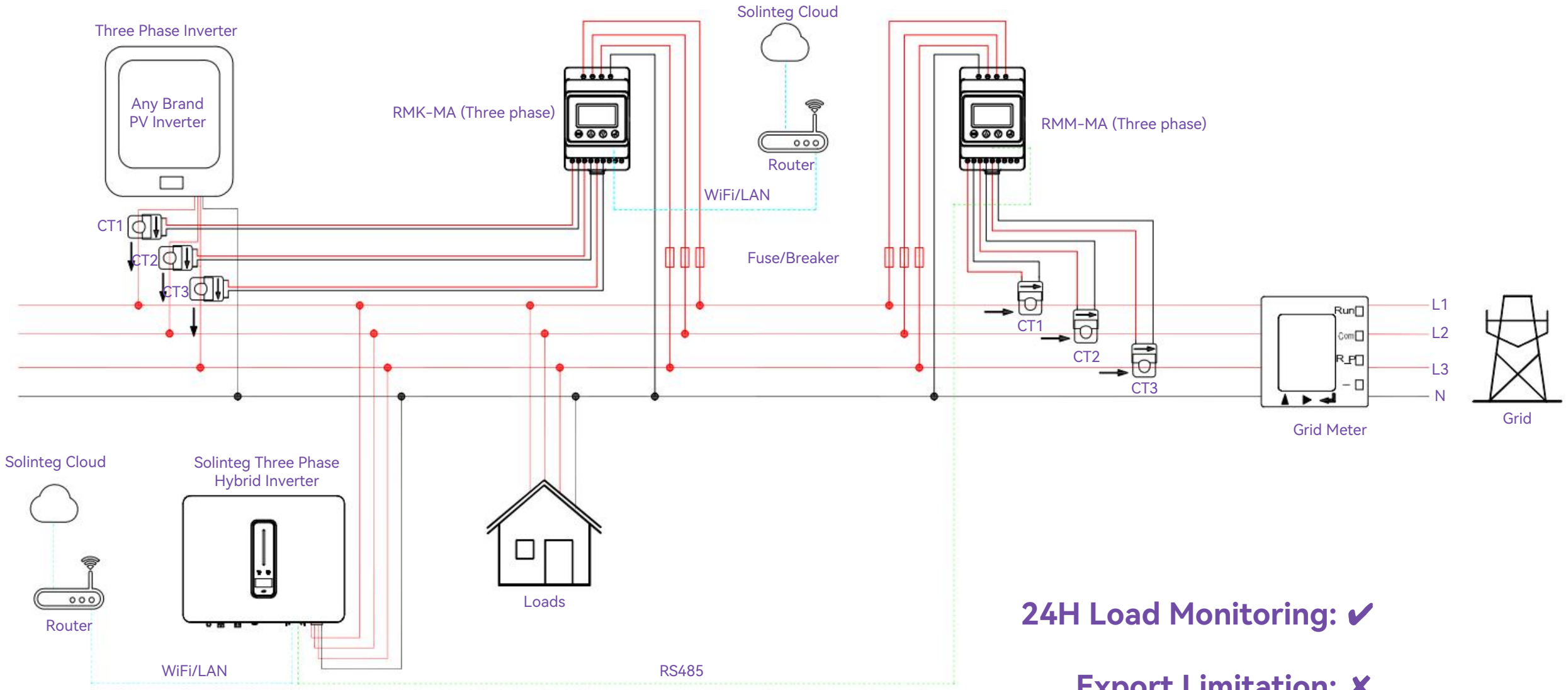
Application07 —— Single Phase AC Coupled System



24H Load Monitoring: ✔

Export Limitation: ✘

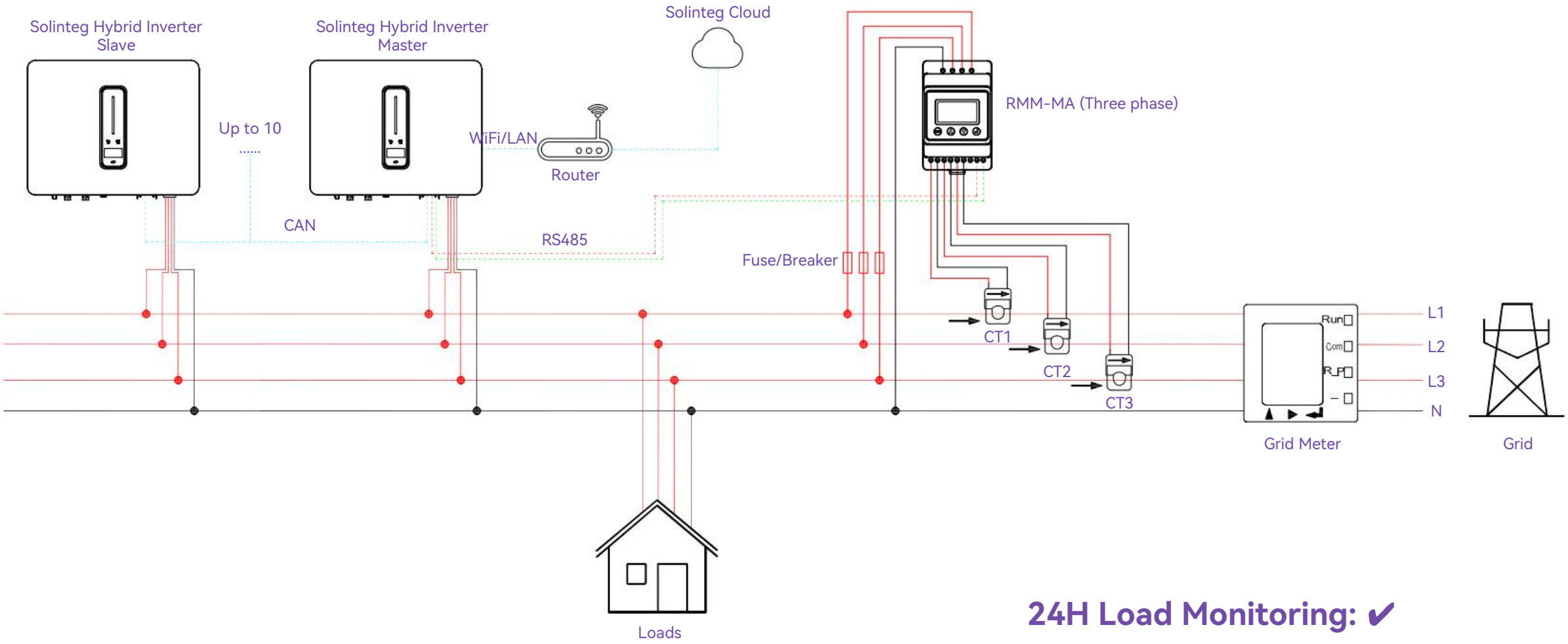
Application08 —— Three Phase AC Coupled System



24H Load Monitoring: ✔

Export Limitation: ✘

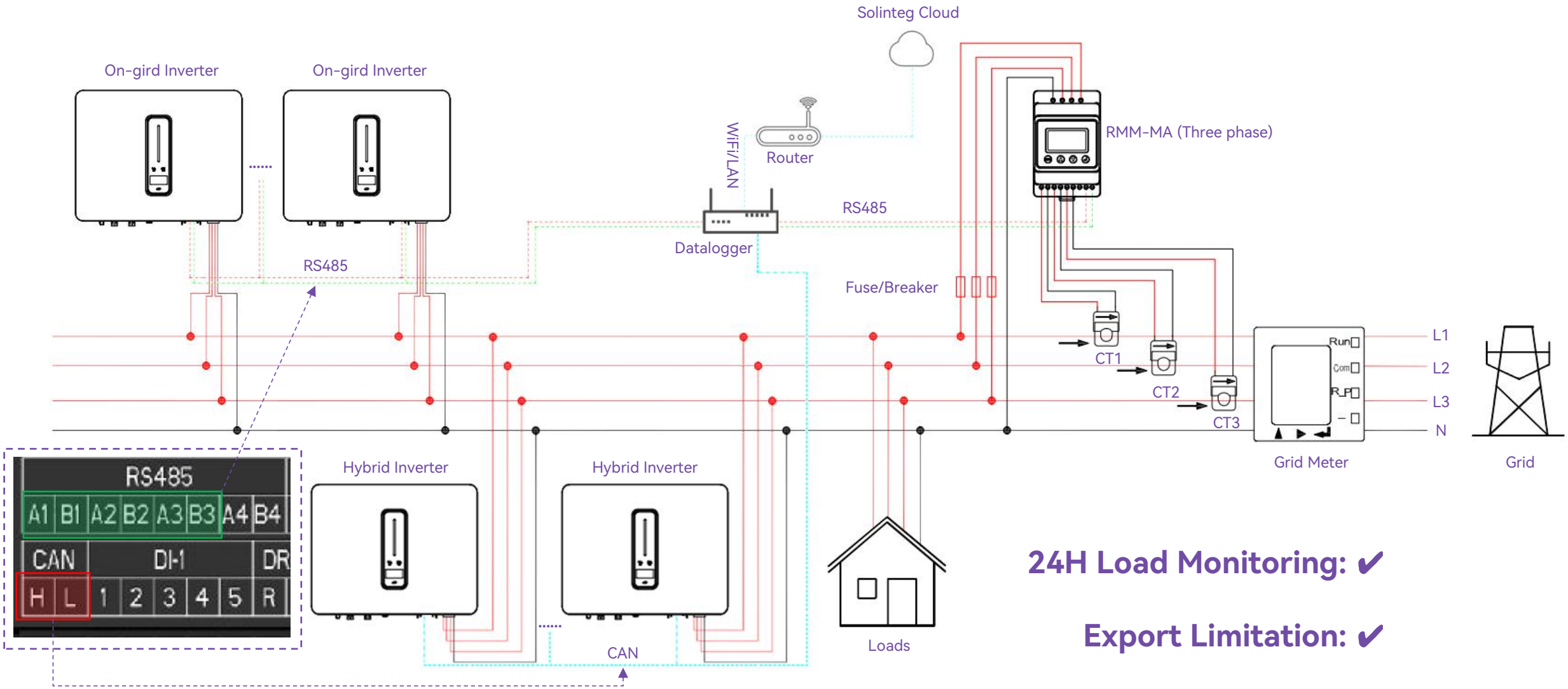
Application09 —— Hybrid Master-slave Parallel System



24H Load Monitoring: ✔

Export Limitation: ✔

Application10 —— Multiple Inverters* System



24H Load Monitoring: ✔

Export Limitation: ✔

*: The inverters must be of the same type, i.e. all the inverters connected to a datalogger must all be hybrid or all be on-grid.
**: Only RS485 1-3 ports are for on-grid inverter.

04
Configuration

Configuration

MODEL	LAN/WIFI	DHCP	CT RATIO	GRID TYPE	GRID FREQUENCY
RMM-MA	/	/	/	○	○
RMK-MA	●	○	/	○	○
RMM-5A	/	/	●	○	○
RMK-5A	●	○	●	○	○

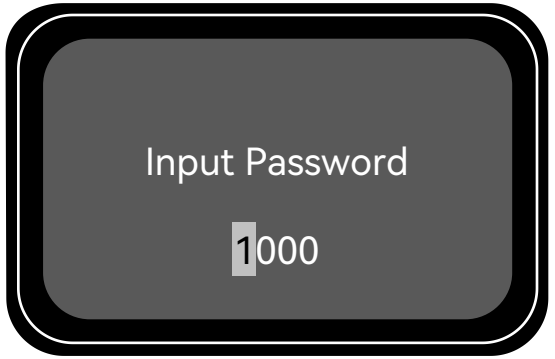
●: Need/Suggest to be configured.

○: Whether to configure it according to site actual requirement.

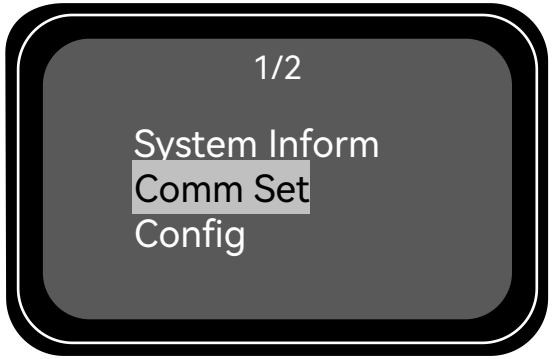
/: No this option.

Configuration —— RMK Series Network Configuration

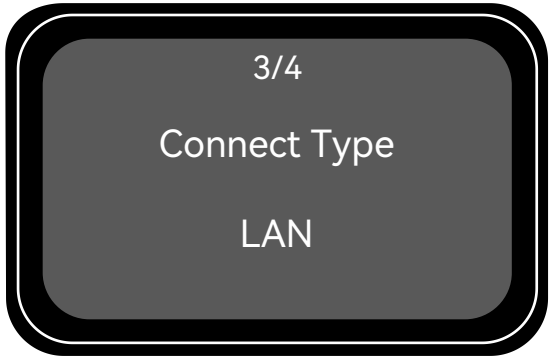
Step1: Press enter



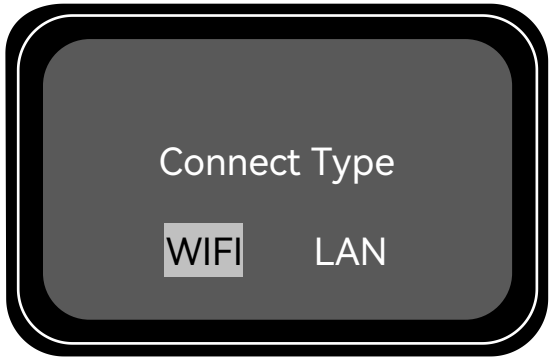
Step2: Input password



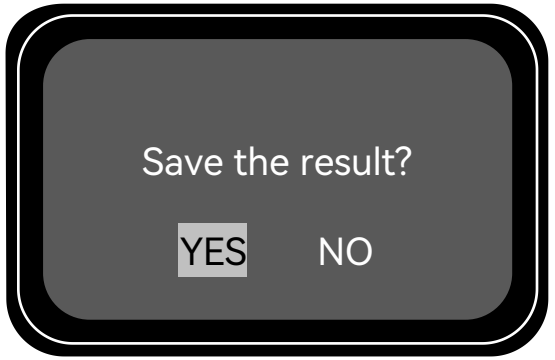
Step3: Choose Comm Set



Step4: Switch to Connect Type



Step5: Enter and choose correct network type

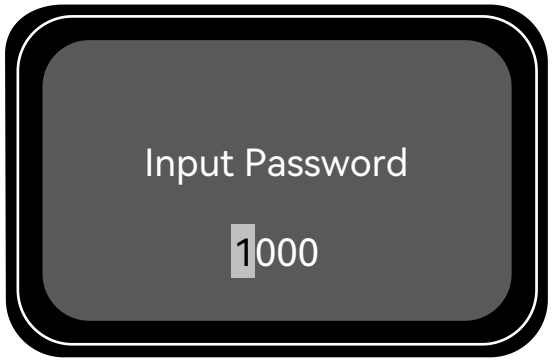


Step6: Enter to save the set

Step7: Set succeeded

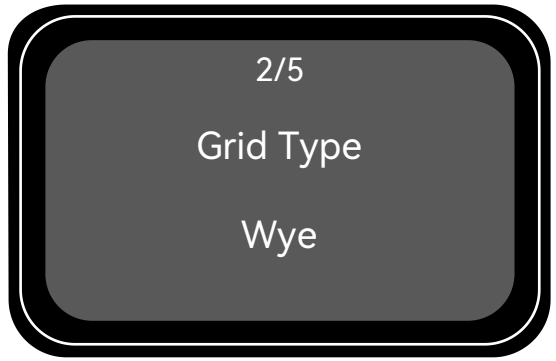
Configuration —— Grid Type* Configuration

Step1: Press enter

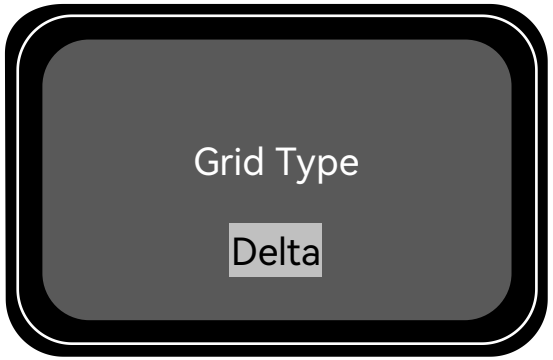


Step2: Input password

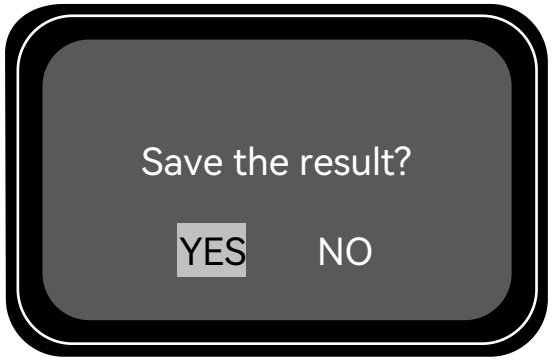
Step3: Choose Config



Step4: Switch to Grid Type



Step5: Enter and choose the correct grid type



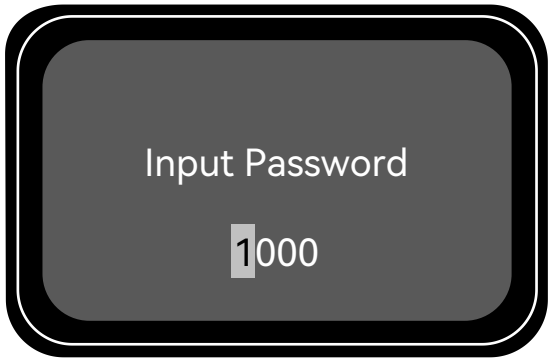
Step6: Enter to save the set

Step7: Set succeeded

*: Default grid type is Wye.

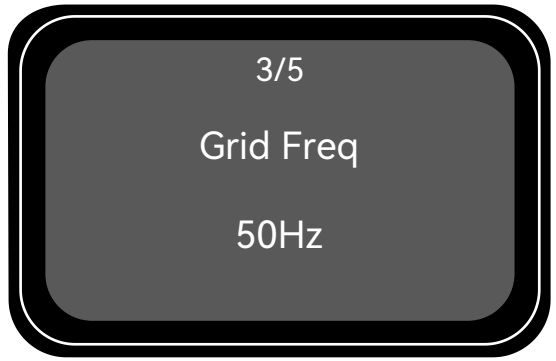
Configuration —— Grid Frequency* Configuration

Step1: Press enter

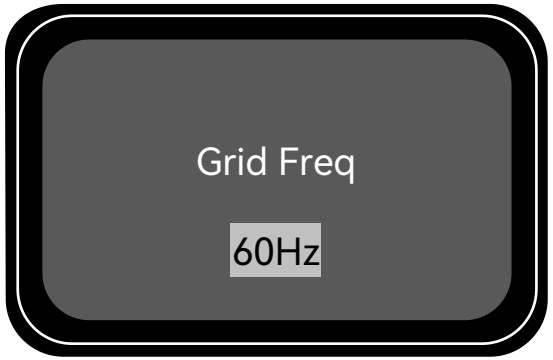


Step2: Input password

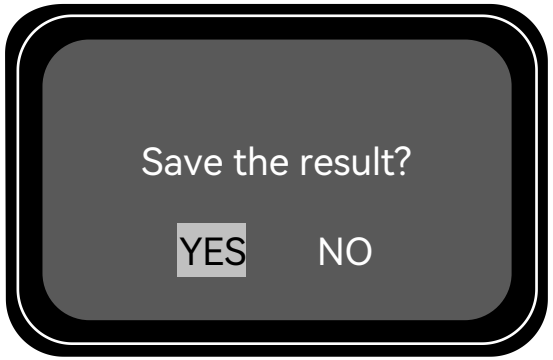
Step3: Choose Config



Step4: Switch to Grid Freq



Step5: Enter and choose the correct grid frequency



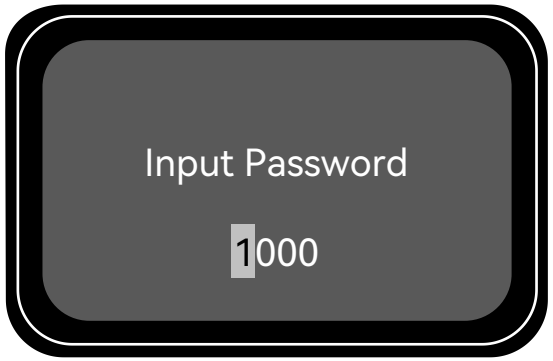
Step6: Enter to save the set

Step7: Set succeeded

*: Default grid frequency is 50Hz.

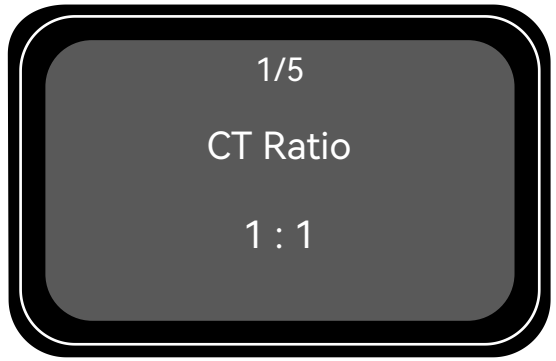
Configuration —— 5A Series* CT Ratio Configuration

Step1: Press enter

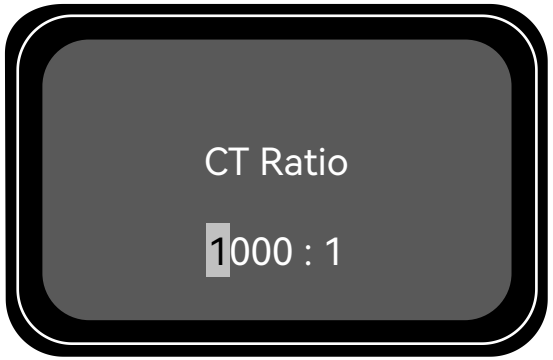


Step2: Input password

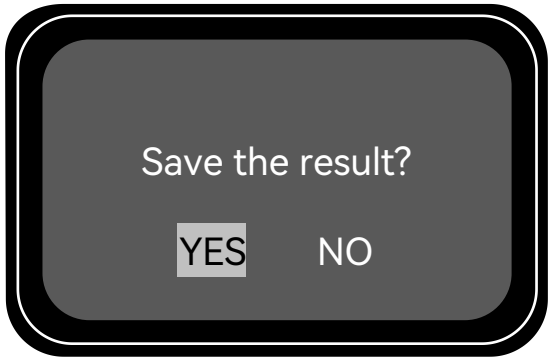
Step3: Choose Config



Step4: Switch to CT Ratio



Step5: Enter and choose the correct ratio of CT(s) purchased



Step6: Enter to save the set

Step7: Set succeeded

*: CT ratio of MA series is fixed and can not change.

05
Q & A

SCELINTEG

Q & A

Q: Can customers purchase only the inverter without the meter?

A: Yes. But only for on-grid inverters. The export limitation function and the load power consumption monitoring function will not be available without the meter. Hybrid inverter can not work properly without the meter.

Q: What brands of meters can Solinteg inverters be compatible with?

A: Solinteg RMM/RMK series; Acrel ACR10RH for hybrid inverters.

Q: Can solinteg smart meter communicate with other brands inverter diretcly?

A: No, we haven’t yet made compatibility with other brands inverter.

Q & A

Q: Can RMK series be used for hybrid inverters?

A: No.

Q: Can RMM series be used for on-grid inverters?

A: Yes, but not recommended. The RMM cannot communicate with the server directly, so load power monitoring is not available at night.

Q: Can the inverter 100% limit power export with the meter?

A: No meter can 100% limit the power. Because of CT accuracy and system response time, all meters will have a small amount of error (within 1% of Solinteg meter) even when the power limitation is turned on to 100%. And the meter meets the relevant requirements is enough.

THANK YOU

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