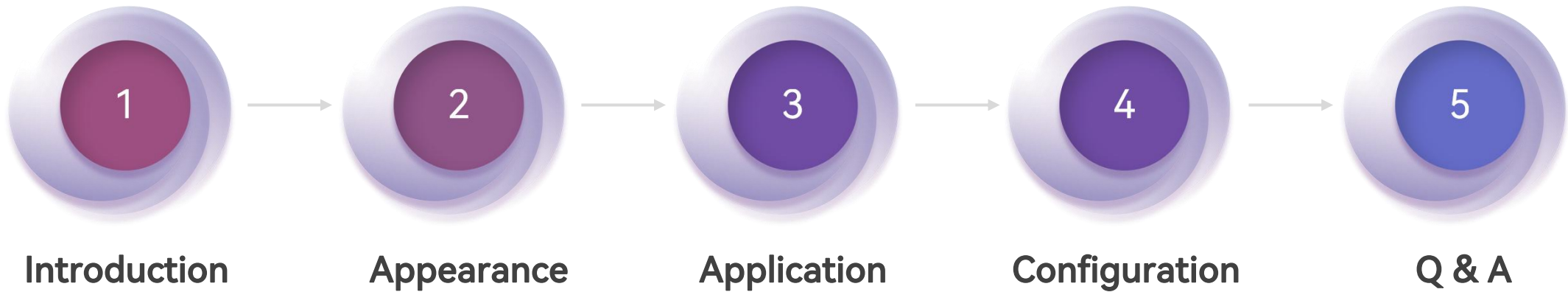


# INTEG-R Smart Meter and CT Introduction

[www.solinteg.com](http://www.solinteg.com)

# CONTENT





**01**

**⚡ Introduction**

**SOLINTEG**

# Highlights

- 24/7 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.



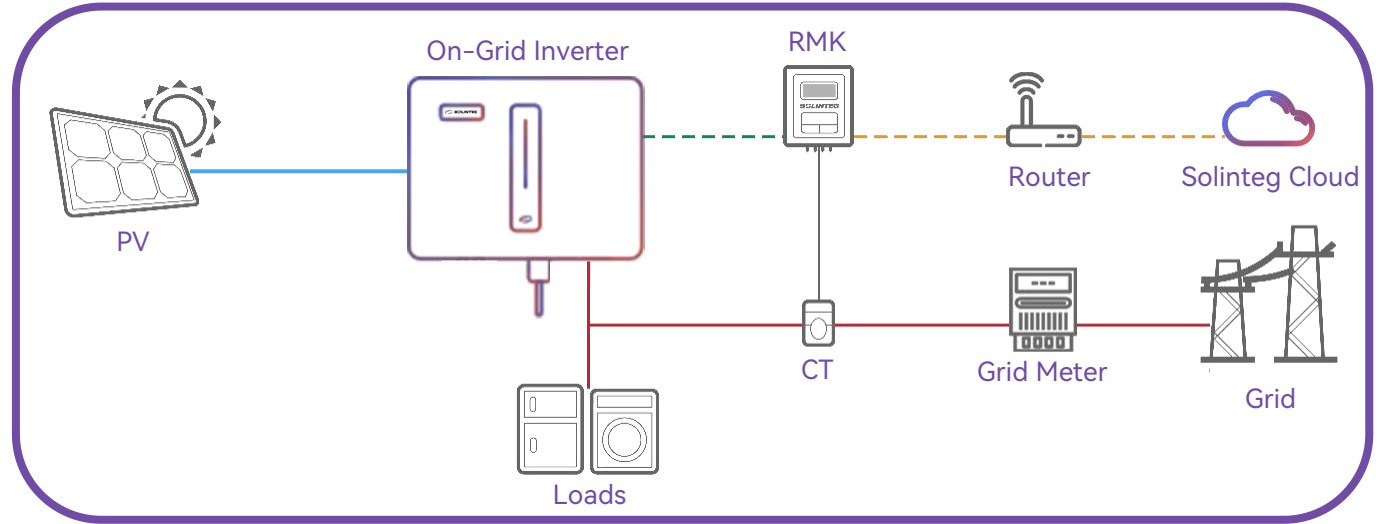
# Main Function

24H Load Monitoring

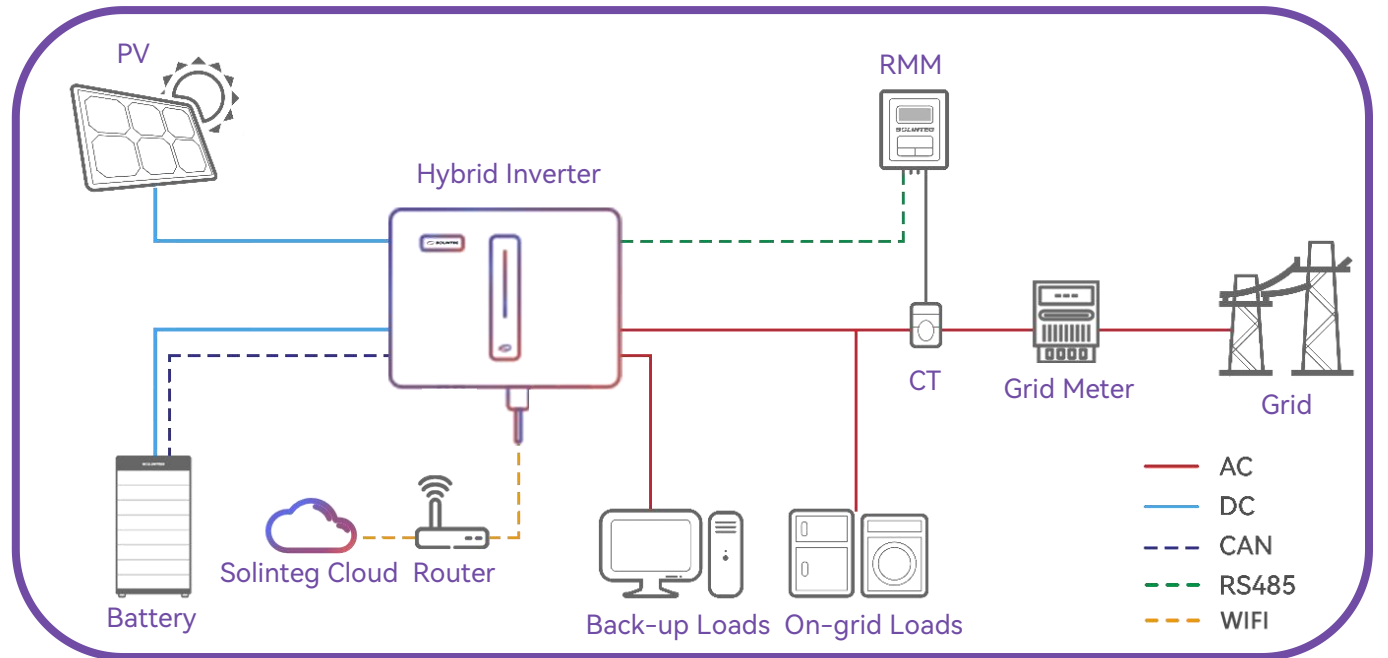
Export Limitation

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

**Communication:** RS485

**Self-consumption:** < 5VA

**Applicable Series:** MHS, MHT, OGT

**RMM**

**Communication:** RS485, WiFi/LAN

**Self-consumption:** < 7.5VA

**Applicable Series:** OGS, OGT

**RMK**

**MA**

**CT:** With, 120A/200A/300A optional

**Rated Current:** ≤ 100mA

**5A**

**CT:** Without, Self-purchase

**Rated Current:** ≤ 5A



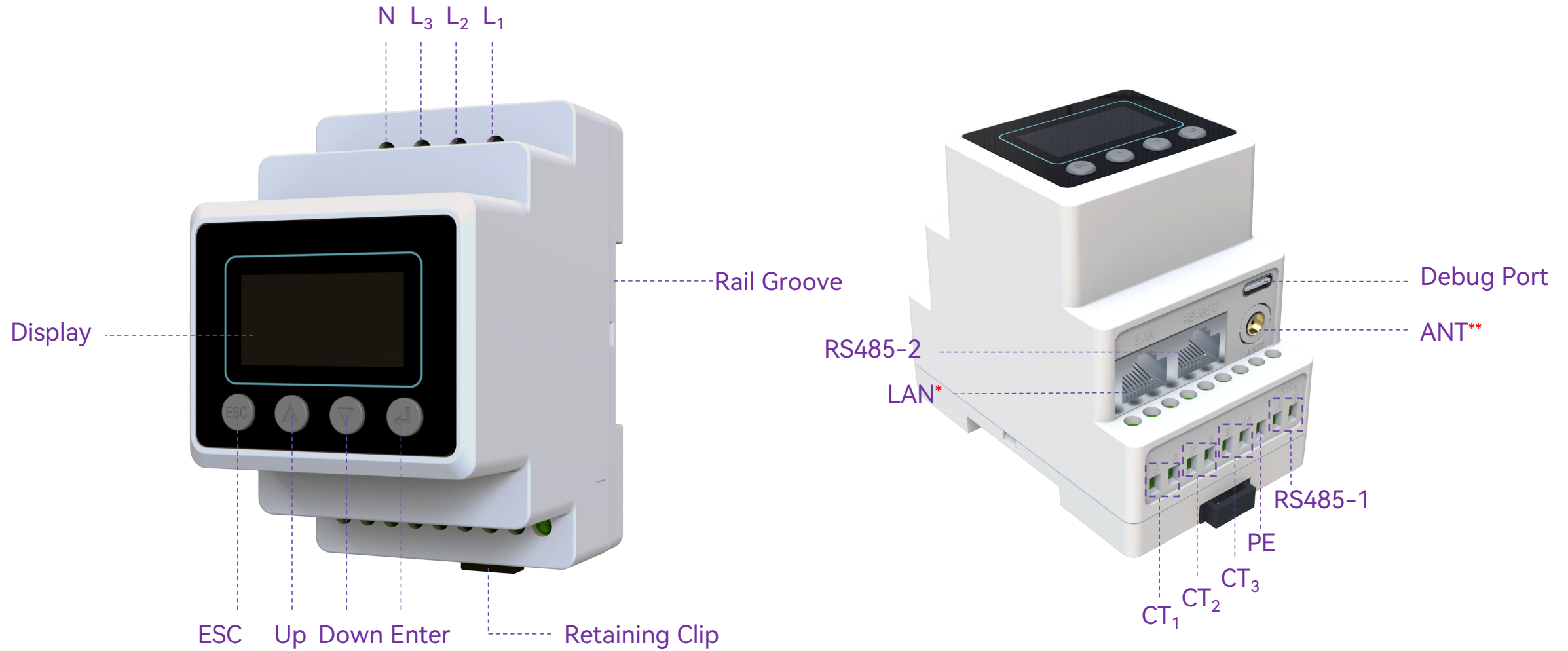
**02**

**⚡ Appearance**

**SOULINITEG**



# 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:



$\Phi 16$  120A /  $\Phi 24$  200A /  $\Phi 35$  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

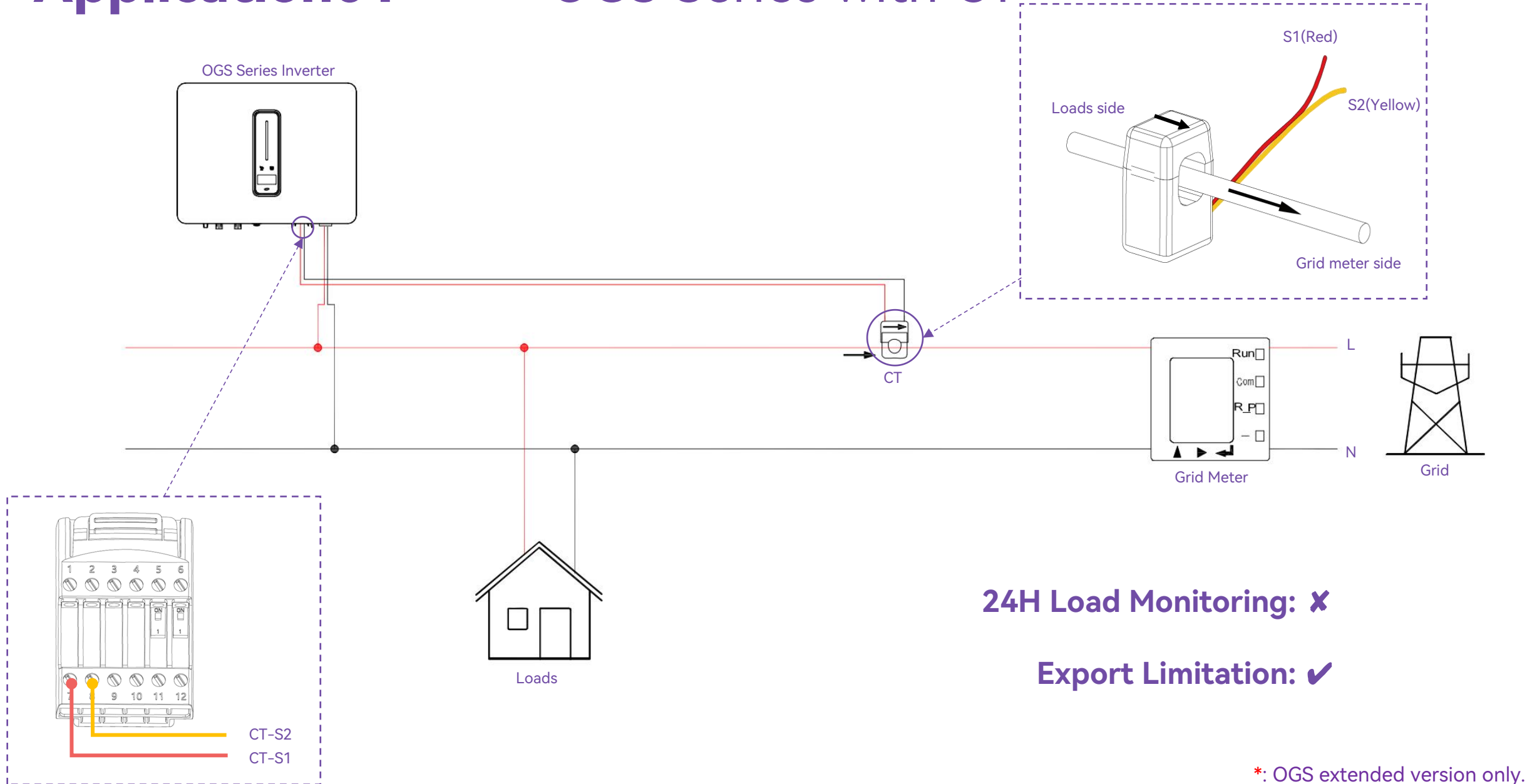


**03**

**⚡ Application**

**SOLINTEG**

# Application01\* — OGS Series with CT

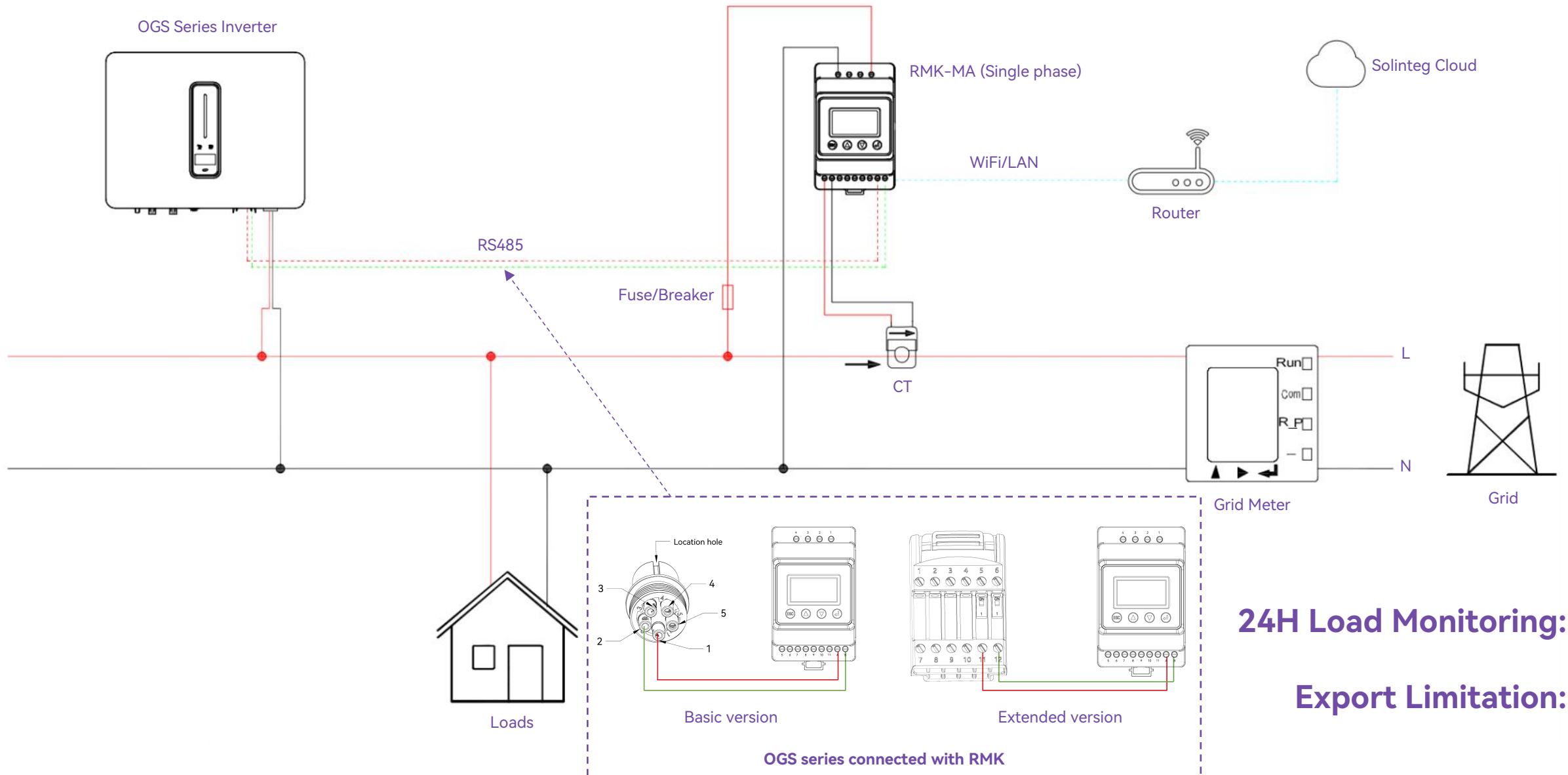


24H Load Monitoring: ✘

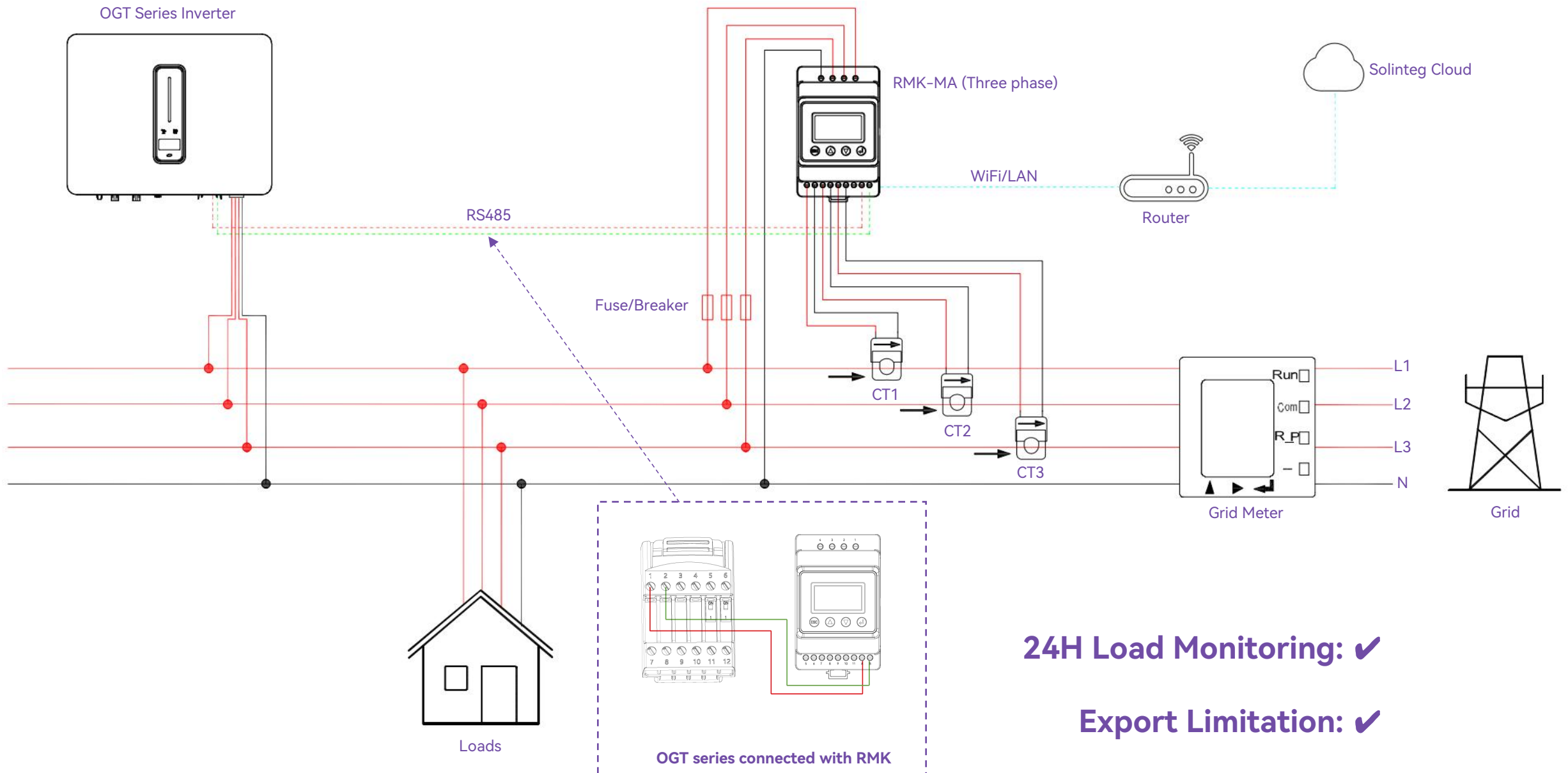
Export Limitation: ✔

\*: OGS extended version only.

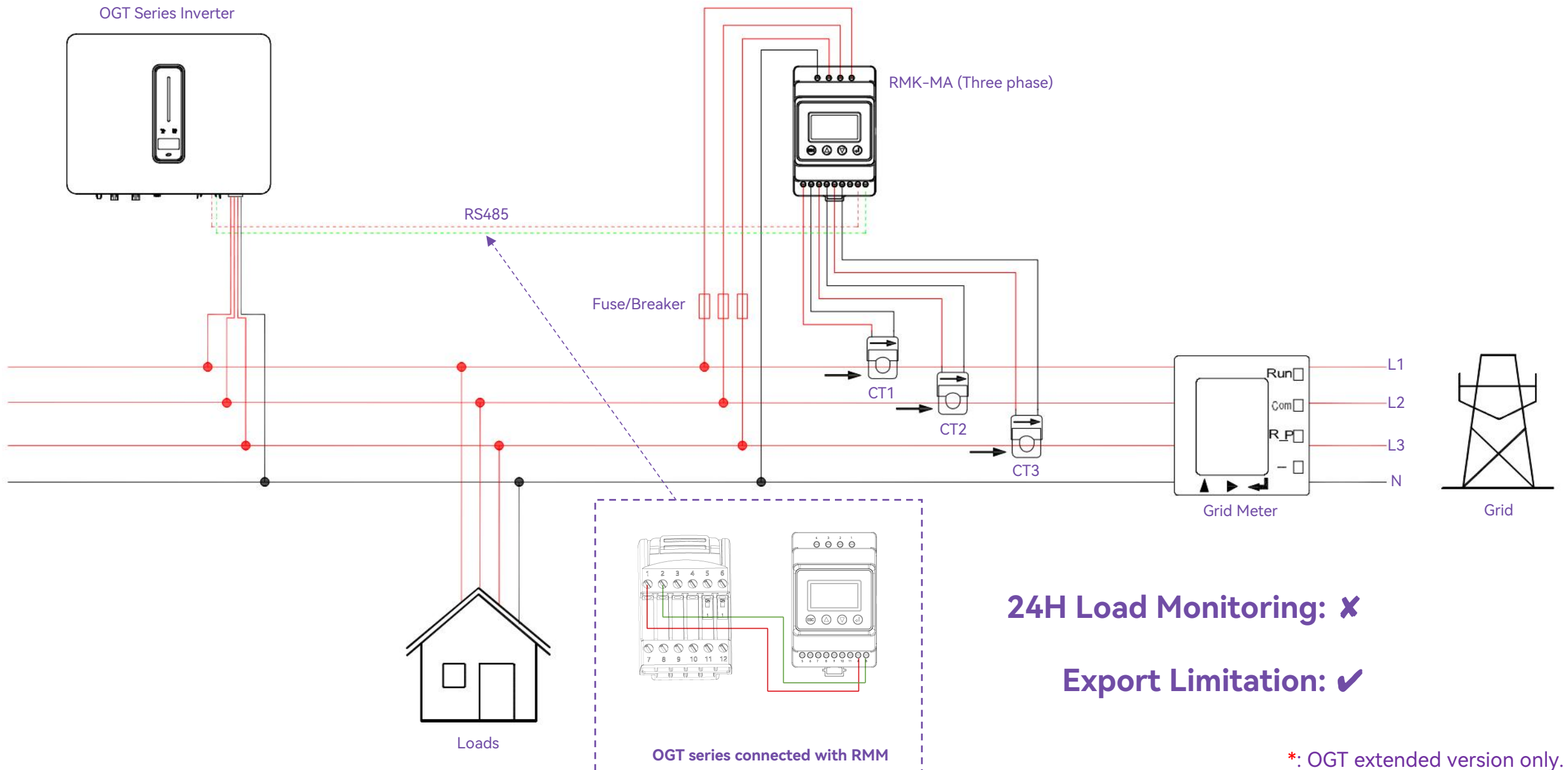
# Application02 — OGS Series with RMK



# Application03 — OGT Series with RMK

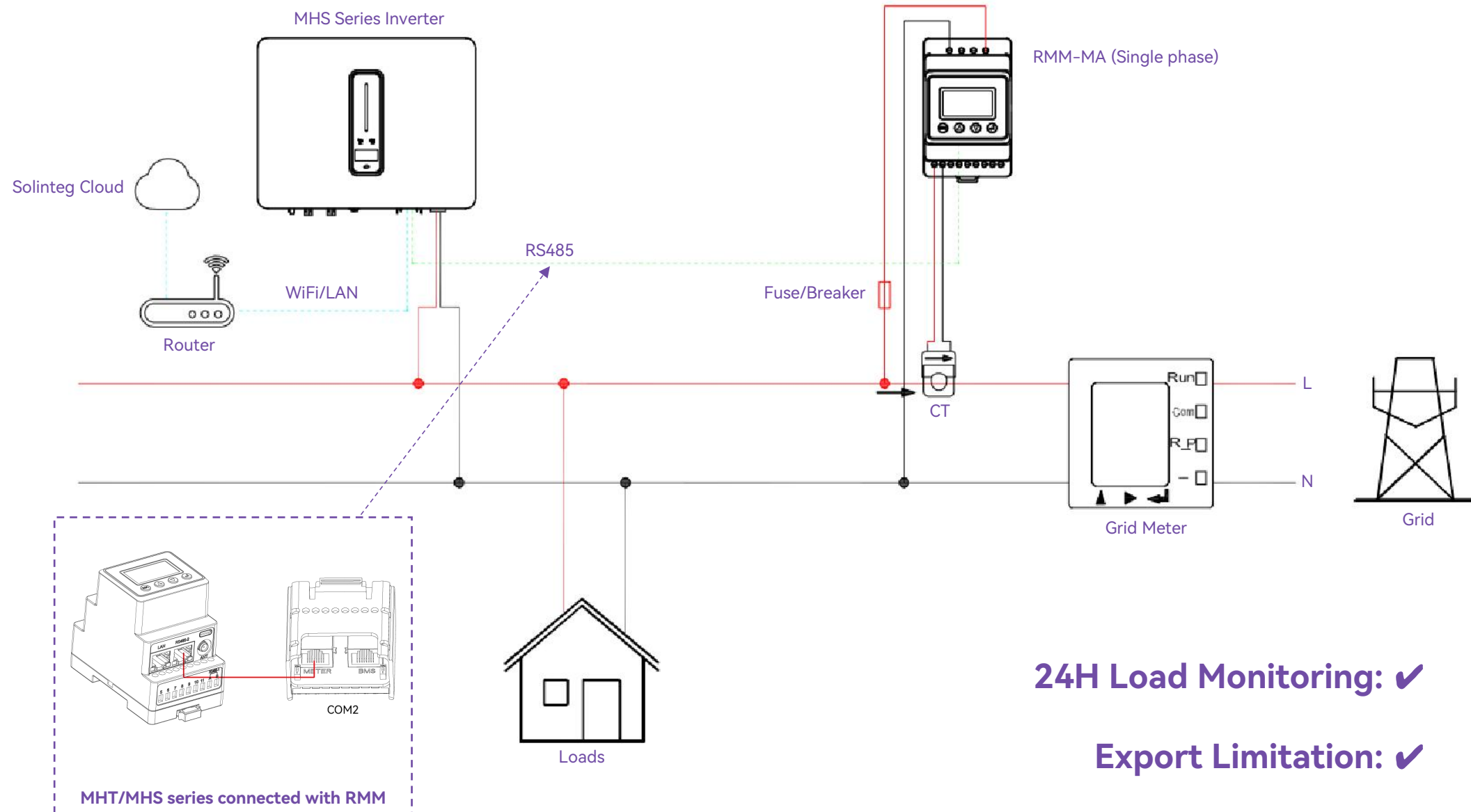


# Application04 — OGT Series with RMM\*





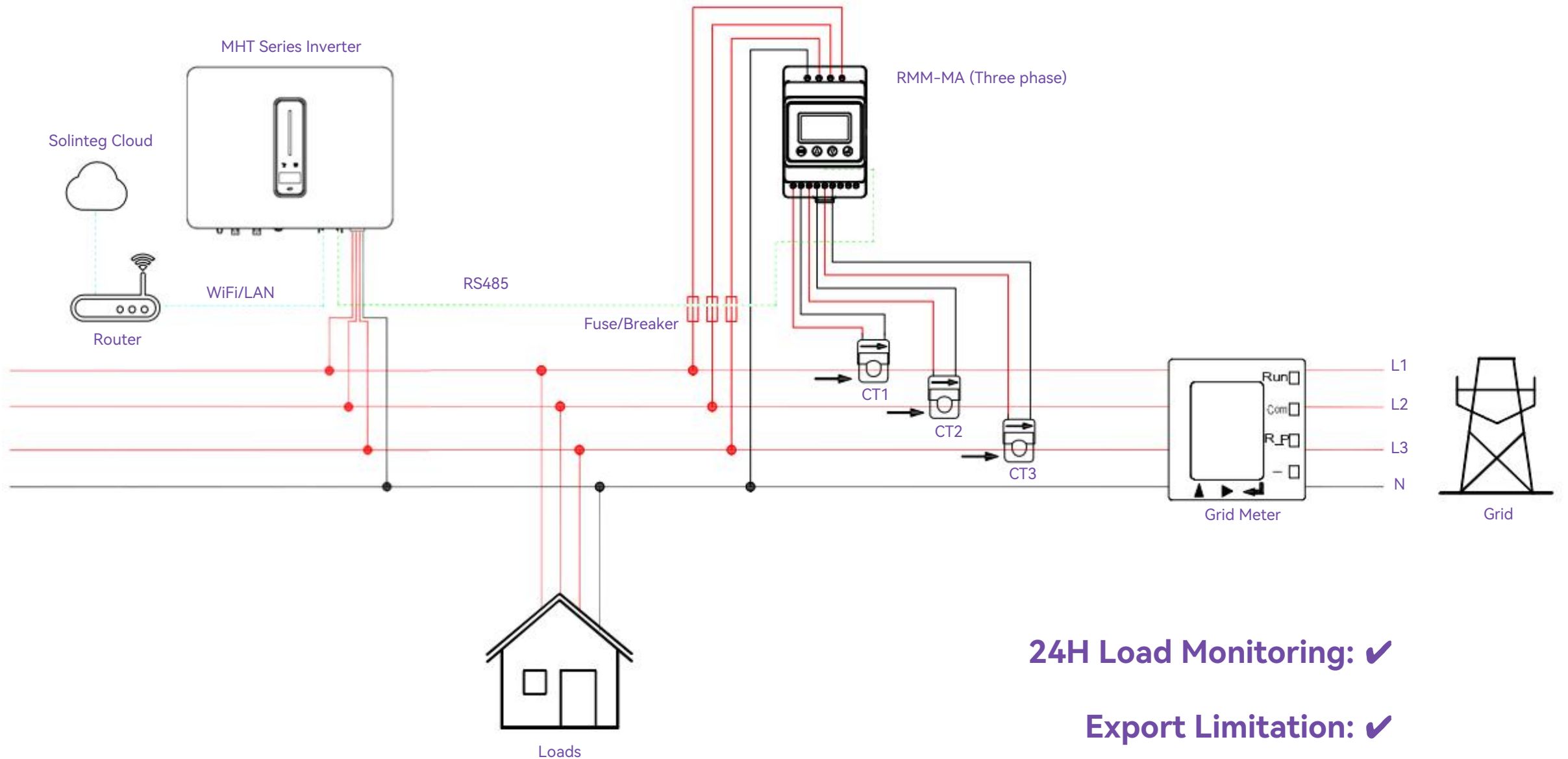
# Application05 — MHS Series with RMM



24H Load Monitoring: ✓

Export Limitation: ✓

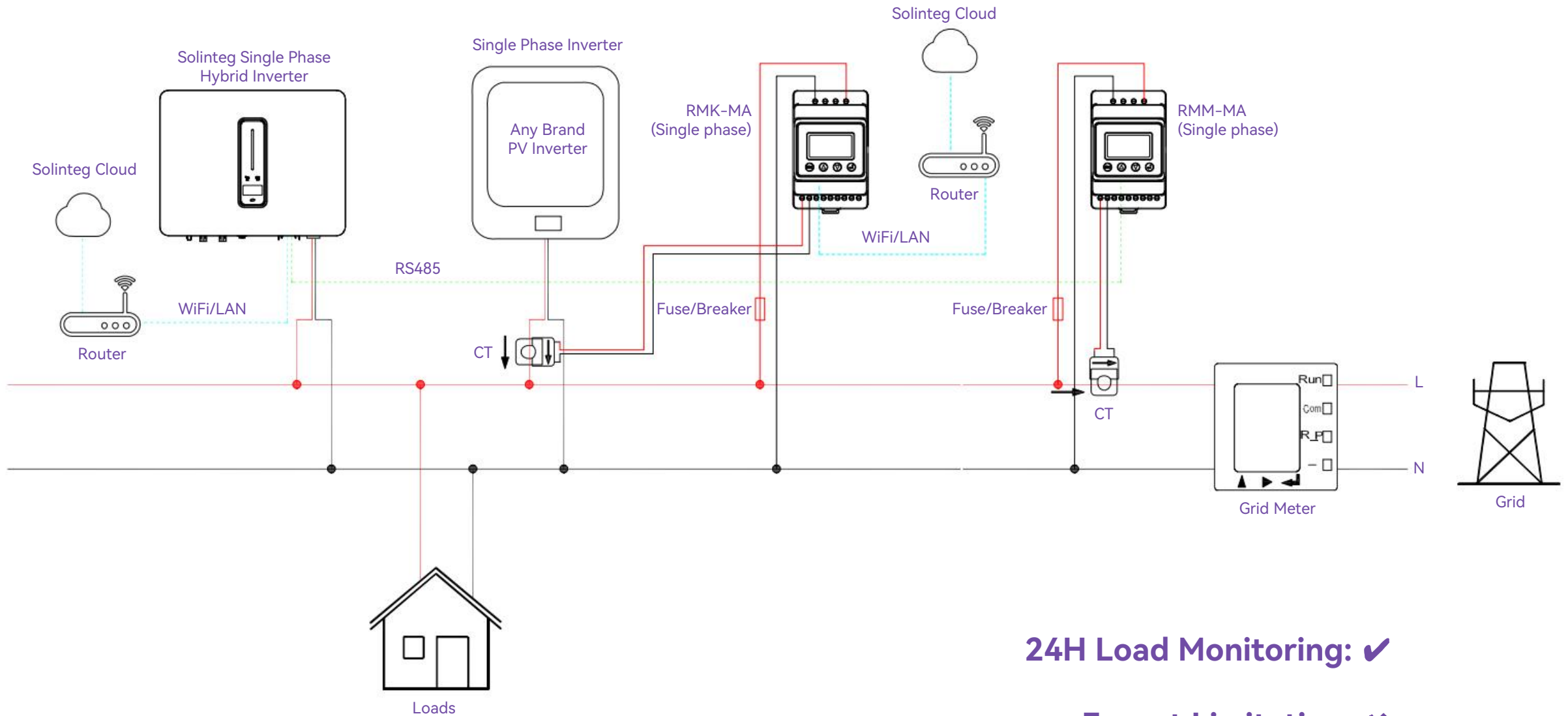
# Application06 — MHT Series with RMM



24H Load Monitoring: ✓

Export Limitation: ✓

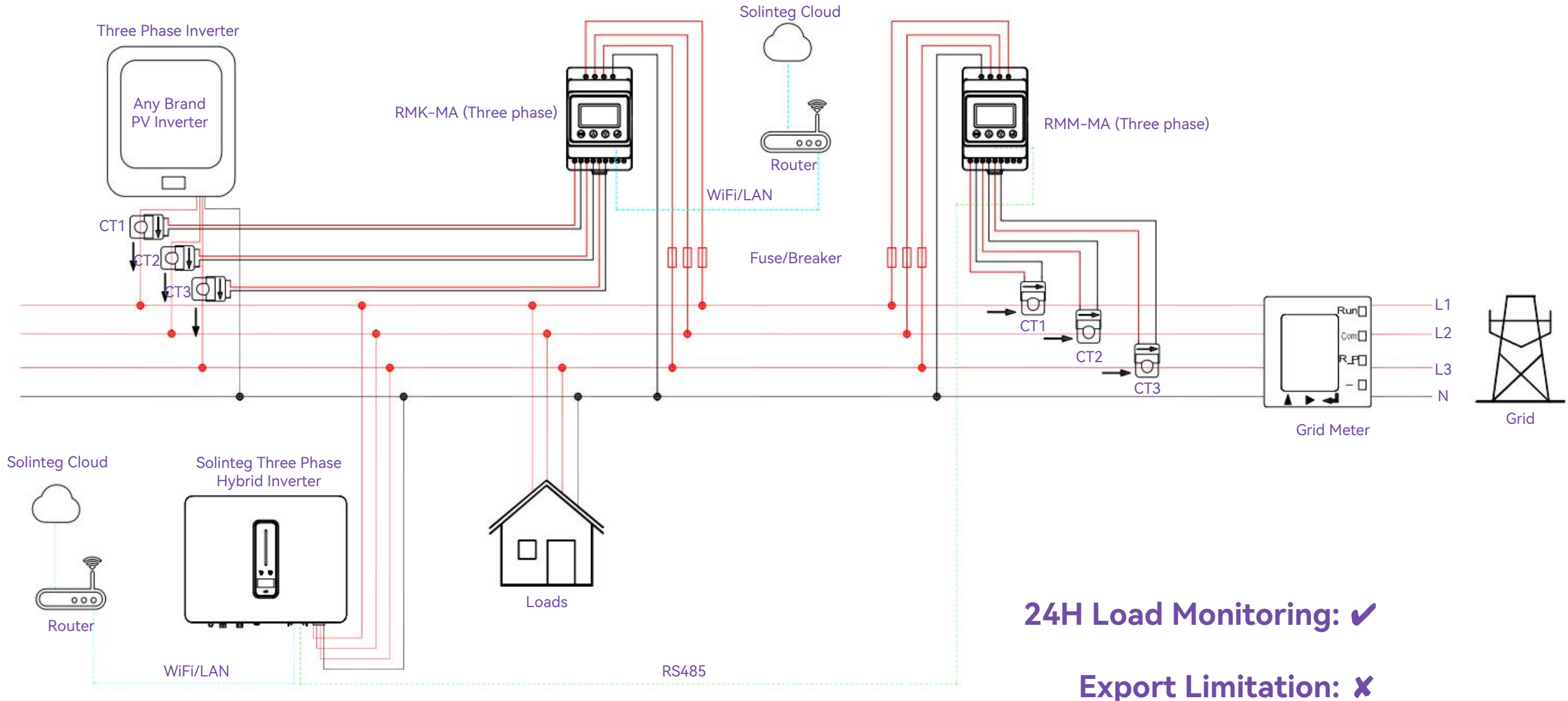
# Application07 — Single Phase AC Coupled System



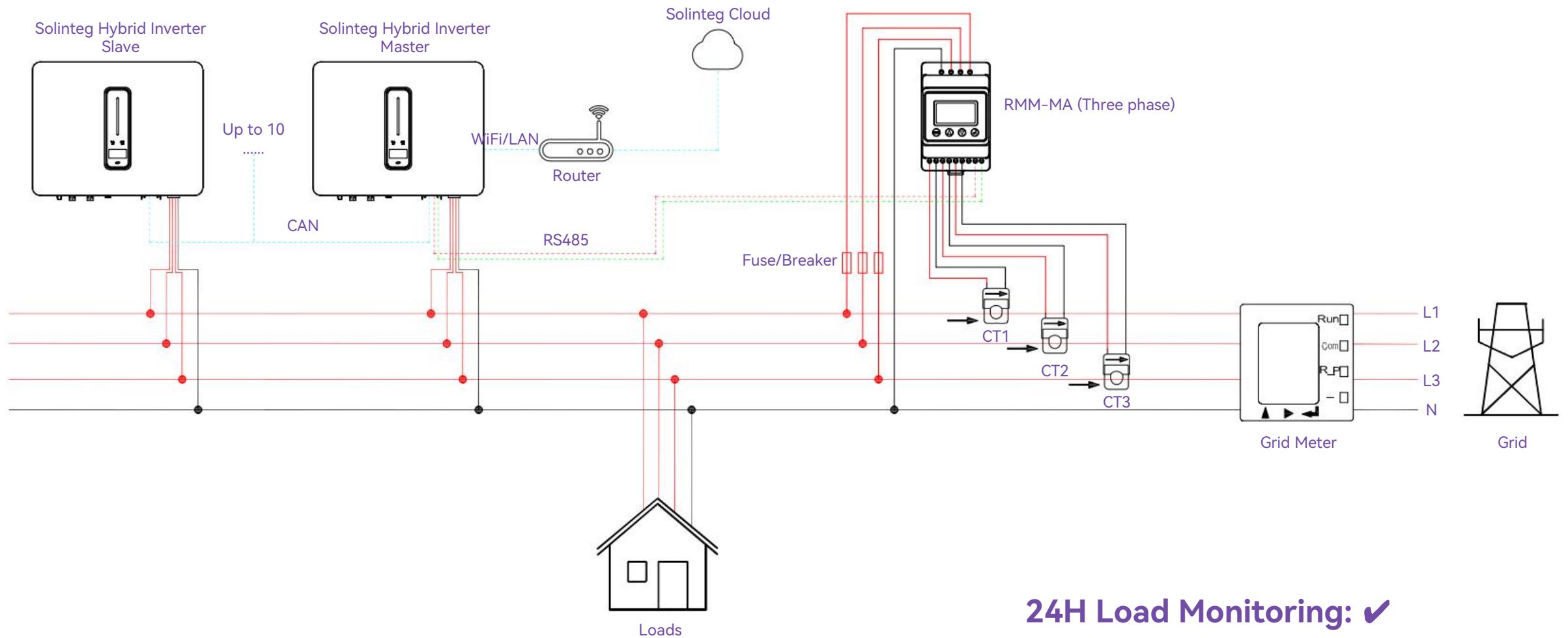
24H Load Monitoring: ✓

Export Limitation: ✗

# Application08 — Three Phase AC Coupled System



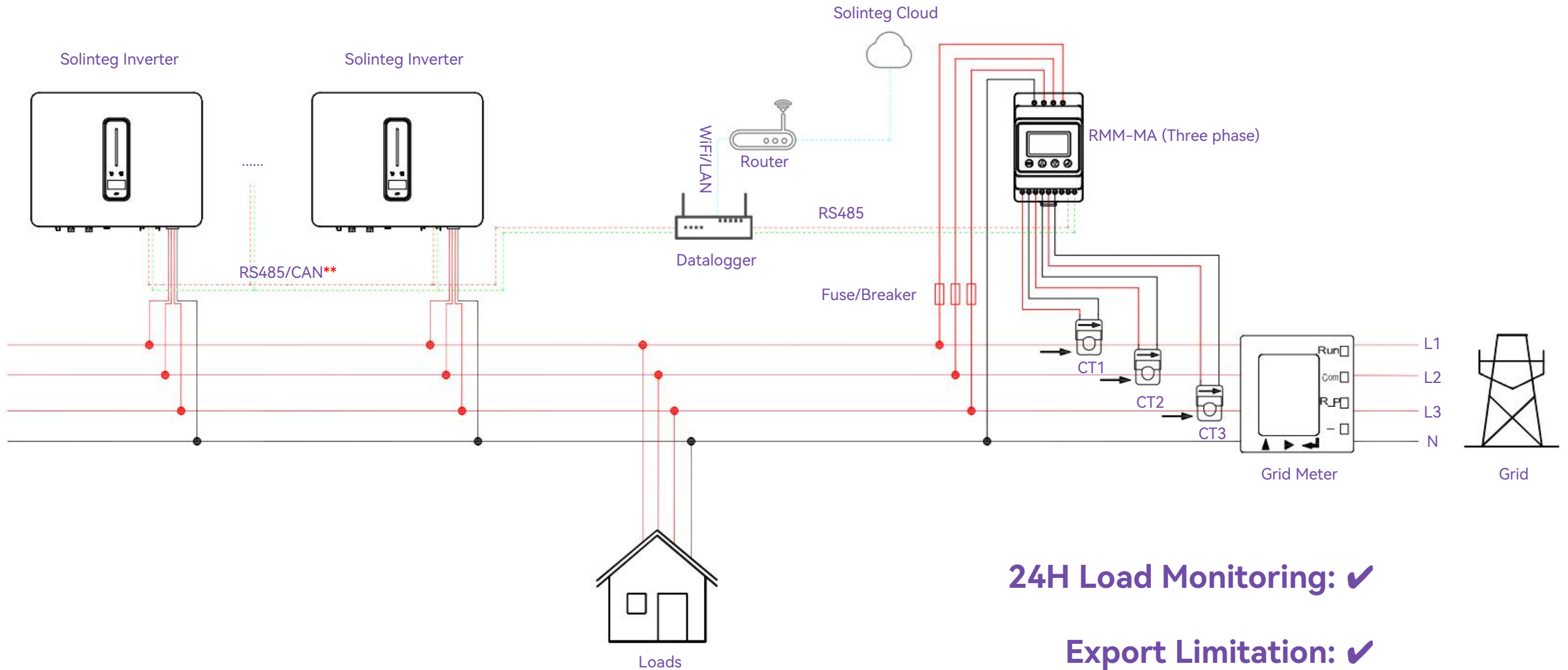
# Application09 — Hybrid Master-slave Parallel System



24H Load Monitoring: ✓

Export Limitation: ✓

# Application10 — Multiple Inverters\* System



\*: 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.

\*\* : RS485 for on-grid inverters communication, up to 90 units; CAN for hybrid inverters parallel, up to 10 units.



**04**

**⚡ Configuration**

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# Configuration

MODEL	LAN/WIFI	DHCP	CT RATIO	GRID TYPE	GRID FREQUENCY
RMM-MA	/	/	/	<input type="radio"/>	<input type="radio"/>
RMK-MA	<input checked="" type="radio"/>	<input type="radio"/>	/	<input type="radio"/>	<input type="radio"/>
RMM-5A	/	/	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
RMK-5A	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

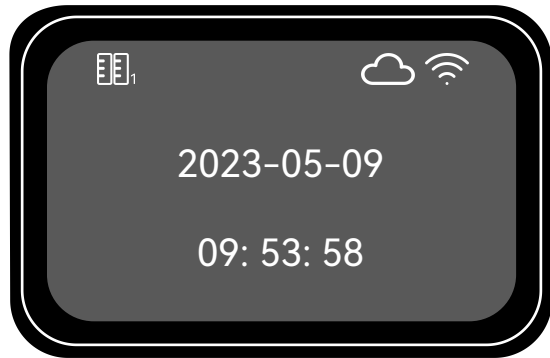
●: Need/Suggest to be configured.

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

/: No this option.



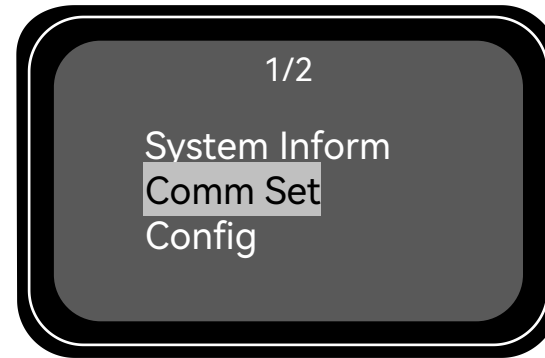
# Configuration — RMK Series Network Configuration



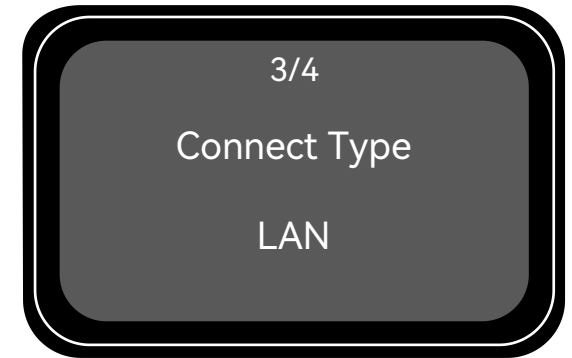
Step1: Press enter



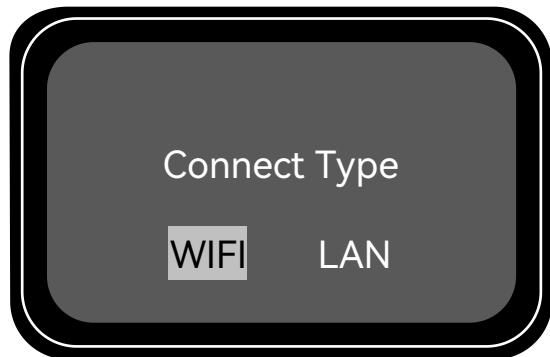
Step2: Input password



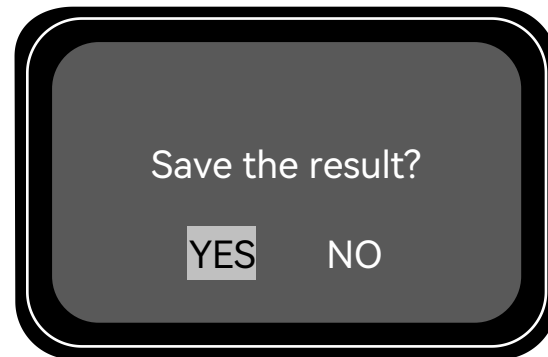
Step3: Choose Comm Set



Step4: Switch to Connect Type



Step5: Enter and choose correct network type



Step6: Enter to save the set

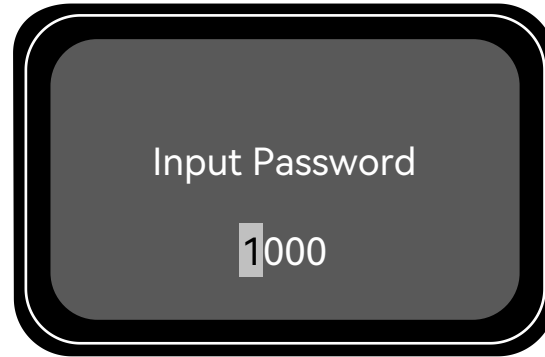


Step7: Set succeeded

# Configuration — Grid Type\* Configuration



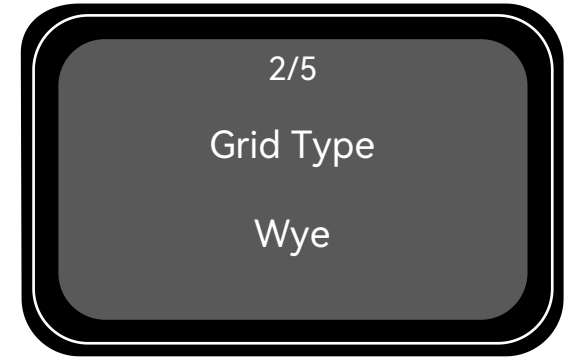
Step1: Press enter



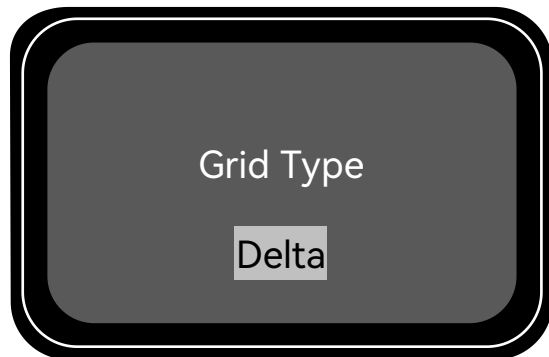
Step2: Input password



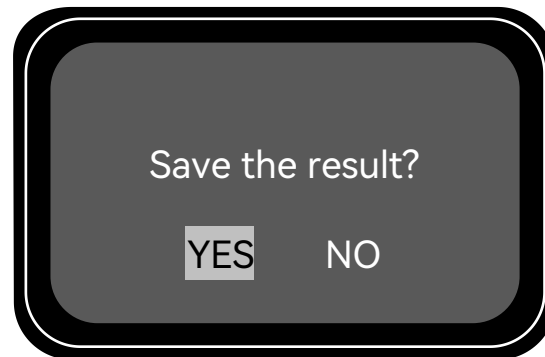
Step3: Choose Config



Step4: Switch to Grid Type



Step5: Enter and choose the correct grid type



Step6: Enter to save the set



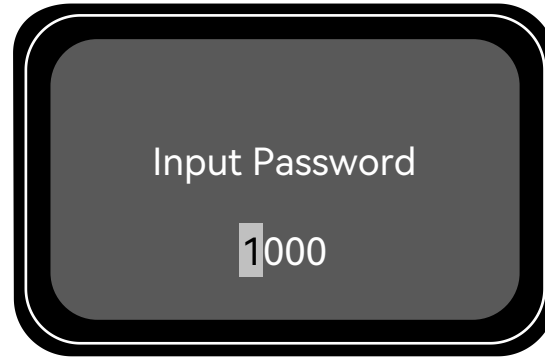
Step7: Set succeeded

\*: Default grid type is Wye.

# Configuration — Grid Frequency\* Configuration



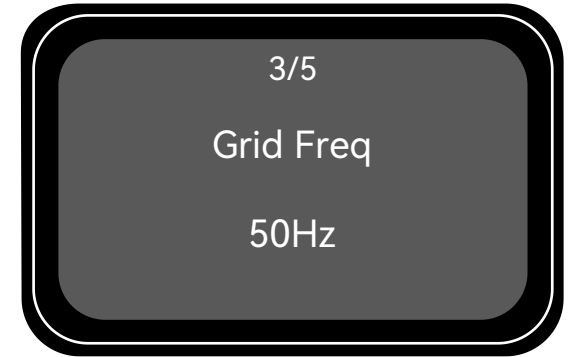
Step1: Press enter



Step2: Input password



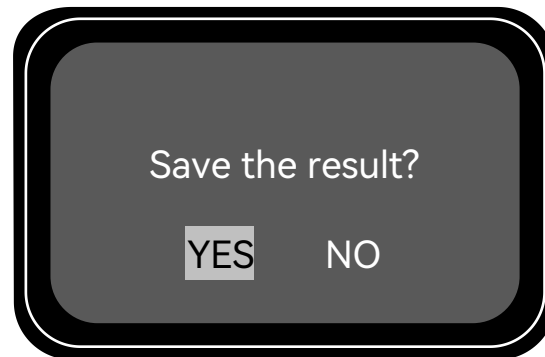
Step3: Choose Config



Step4: Switch to Grid Freq



Step5: Enter and choose the correct grid frequency



Step6: Enter to save the set



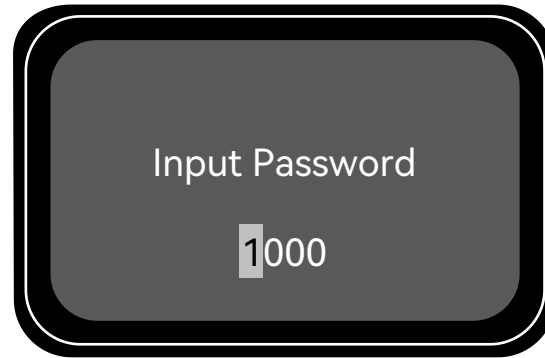
Step7: Set succeeded

\*: Default grid frequency is 50Hz.

# Configuration — 5A Series\* CT Ratio Configuration



Step1: Press enter



Step2: Input password



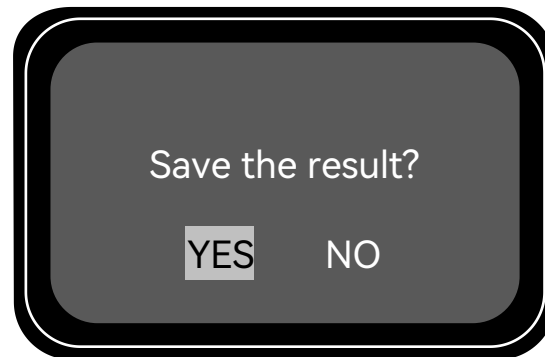
Step3: Choose Config



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**

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## 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 directly?

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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