

# 01 Product Portfolio

02 Small Scale  
C&I Application  
(Single Inverter)

03 Medium Scale  
C&I Application  
( $\leq 10$  Inverters)

04 Large Scale  
C&I Application  
( $> 10$  Inverters)

05 Special Application  
(AFCI, Partial  
Optimization)

# FusionSolar C&I Range of Inverters up to 100KTL



SUN2000-12/15/17/20KTL-M0/M2  
(Three phase inverter)

MPPT/Inputs: 2/4

Local commissioning:

- Built-in WLAN

Communication:

-Smart Dongle-WLAN-FE (Optional)

-Smart Dongle-4G (Optional)

-SmartLogger3000A (Optional)

AFCI: Yes

PID Recovery: Yes

Ripple Control Interface: Yes



SUN2000-29.9KTL/33KTL-A/36KTL  
(Three phase inverter)

MPPT/Inputs: 4/8

Local commissioning:

- USB WLAN adapter

Communication:

-SmartLogger3000A (RS485/AC MBUS)

AFCI: SUN2000-36KTL (Optional model)



SUN2000-50/60KTL-M0  
(Three phase inverter)

MPPT/Inputs: 6/12

Local commissioning:

- USB WLAN adapter

Communication:

-SmartLogger3000A (RS485/AC MBUS)

-Smart Dongle-4G (Optional)



SUN2000-100KTL-M1  
(Three phase inverter)

MPPT/Inputs: 10/20

Local commissioning:

- USB WLAN adapter

Communication:

-SmartLogger3000A (RS485/AC MBUS)

-Smart Dongle-4G (Optional)

AFCI: optional model (New version)

PID Recovery: optional model (New version)

# Communication Options



## Smart Dongle-WLAN-FE

- Max **10** devices communication supported
- Plug & play USB interface connected to inverter for monitoring through WLAN or Fast Ethernet

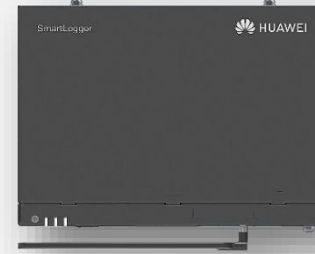
Compatible with SUN2000-12-20KTL-M0/M2 Inverters



## Smart Dongle-4G

- Max **10** devices communication supported
- Plug & play USB interface connected to inverter for monitoring through 4G

Compatible with SUN2000-12-20KTL-M0/M2, 50/60KTL-M0, 100KTL-M1 inverters



## SmartLogger3000A

- Maximum connected devices: **80**
- Communication interface to inverter :
  - ✓ RS485
  - ✓ AC MBUS (isolation transformer)
- Communication option to Cloud:
  - ✓ Ethernet
  - ✓ 4G via built-in 4G module
- Local commissioning option:
  - ✓ Ethernet to WEB UI
  - ✓ App via built-in WLAN
- Power reduction interface for inverter's power control
- Digital & Analog IO for EMI integration



## USB-Adapter2000-C

- WLAN adapter
- USB interface connected to inverter for local commissioning only
- App connected via WLAN

Compatible with SUN2000-29.9KTL, 33KTL-A, 36KTL, 50/60KTL-M0, 100KTL-M1 inverters

# Power Meter Options



Smart Power Sensor  
DTSU666-H 250A/50mA (Three Phase)

- RS485 connected to inverter
- Class 1 high accuracy meter readings for production/consumption monitoring
- 1
- Current transformer included

Compatible with SUN2000-12-20KTL-M0/M2, 50/60KTL-M0, 100KTL-M1 Inverters



3<sup>rd</sup> Party Smart Power Meter

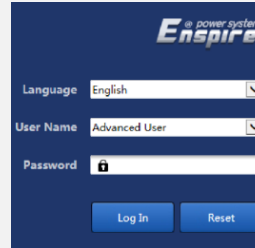
- Compatible Smart Power Meter for SmartLogger3000A in Appendix 1
- Compatible Smart Power Meter for 50/60KTL-M0, 100KTL-M1 in Appendix 2

# FusionSolar APP, Web UI & Smart PV Management System



FusionSolar APP  
(local & remote)

- Support inverter commissioning and plant registration on management system
- Auto-detection of system equipment
- Registering plant by scanning any equipment in the system



Web UI

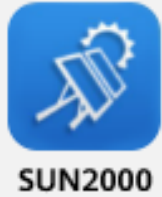
- Local commissioning Web based software to SmartLogger3000A
- Ethernet connection between SmartLogger3000A and software installed laptop



FusionSolar Smart PV  
Management System

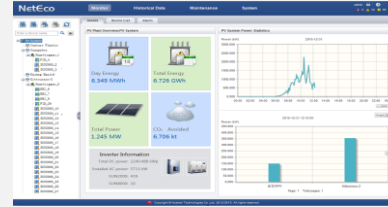
- Unified address <https://intl.fusionsolar.huawei.com>
- Real-time energy flow and energy balance
- Smart IV Curve Diagnosis
- Demo site for all guests to experience system

# SUN2000 APP, NetEco1000S & 3<sup>rd</sup> Party Management System



## SUN2000 APP

- Local commissioning APP
- Support Bluetooth connection, USB cable connection and WLAN connection



## NetEco1000S Management System

- Centralized management on all PV systems
- Smart IV Curve Diagnosis
- Demo site for all guests to experience system

Compatible with 29.9KTL, 33KTL-A, 36KTL, 50-60KTL-M0, 100KTL-M1 inverters



## 3<sup>rd</sup> Party Management System

- Through MODBUS TCP to transfer data to 3rd party monitoring server via SmartLogger3000A / Smart Dongle
- SmartPVMS through restful interface to transfer data to 3rd party monitoring server

3<sup>rd</sup> Party Management System: MC, Solarlog, Laplace, Field logic, Taoke, Ecomegane, Fuji IT etc.

01 Product Portfolio

02 Small Scale C&I Application (Single Inverter)

03 Medium Scale C&I Application ( $\leq 10$  Inverters)

04 Large Scale C&I Application ( $> 10$  Inverters)

05 Special Application (AFCI, Partial Optimization)

# Small Scale C&I Application (single inverter)

SUN2000-12/15/17/20KTL-M0/M2, 29.9KTL, 33KTL-A, 36KTL, 50/60KTL-M0, 100KTL-M1

Inverter	Communication	Smart Power Sensor	Mgt. System	AFCI	PID Recovery	Ripple Control
SUN2000-12/15/17/20KTL-M0/M2	Smart Dongle WLAN-FE Smart Dongle 4G	DTSU666-H 250A/50mA (Three Phase)	FusionSolar	Yes	Yes	Yes (Inverter has built-in RRCR interface)
SUN2000-29.9KTL, 33KTL-A SUN2000-36KTL	SmartLogger3000A	Compatible smart meter listed in Annex 1	FusionSolar	Only applicable to SUN2000- 36KTL (AFCI model)	No	Yes (SmartLogger has built-in RRCR interface)
SUN2000-50/60KTL-M0	Smart Dongle 4G	Compatible smart meter listed in Annex 2	FusionSolar	No	No	No
	SmartLogger3000A	Compatible smart meter listed in Annex 1				Yes (SmartLogger has built-in RRCR interface)
SUN2000-100KTL-M1	Smart Dongle 4G	Compatible smart meter listed in Annex 2	FusionSolar	New version	New version	No
	SmartLogger3000A	Compatible smart meter listed in Annex 1				Yes (SmartLogger has built-in RRCR interface)

# SUN2000-12/15/17/20KTL-M0/M2 – Single Inverter

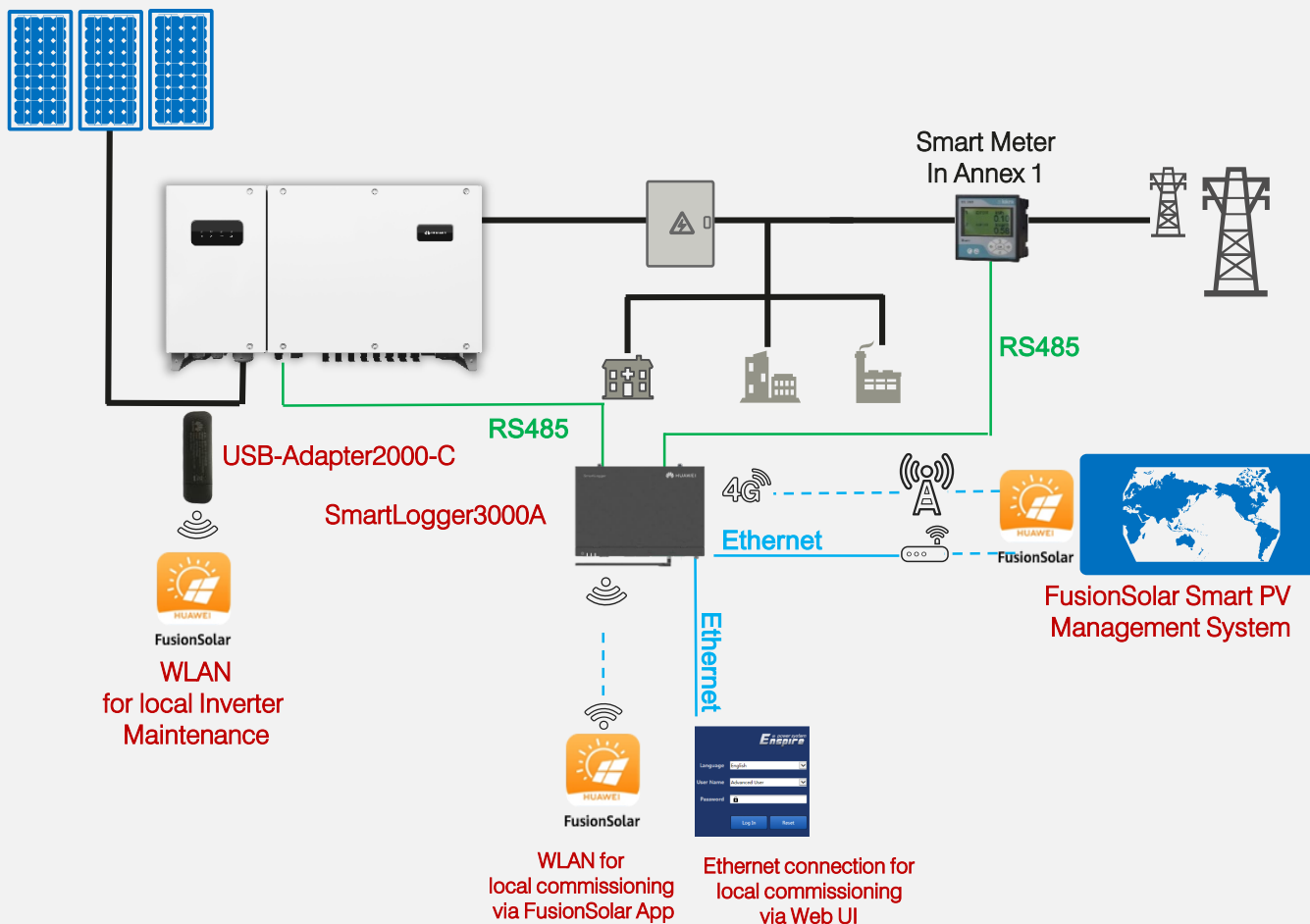


## Remote Monitoring

- PID recovery for better module performance.

# Small Scale C&I Application

SUN2000-29.9KTL, 33KTL-A, 36KTL – Single Inverter



## Local Commissioning:

- Web UI installed laptop connecting to SmartLogger3000A via its Ethernet port.
- FusionSolar App connecting to SmartLogger3000A via its built-in WLAN communication.

## Remote Monitoring

- SmartLogger3000A communicates to FusionSolar Smart PV Management System via Ethernet
- SmartLogger3000A communicates to FusionSolar Smart PV Management System via built-in 4G

Smart meter (Listed in Annex 1) connects to SmartLogger3000A via RS485 for power output monitoring or control.

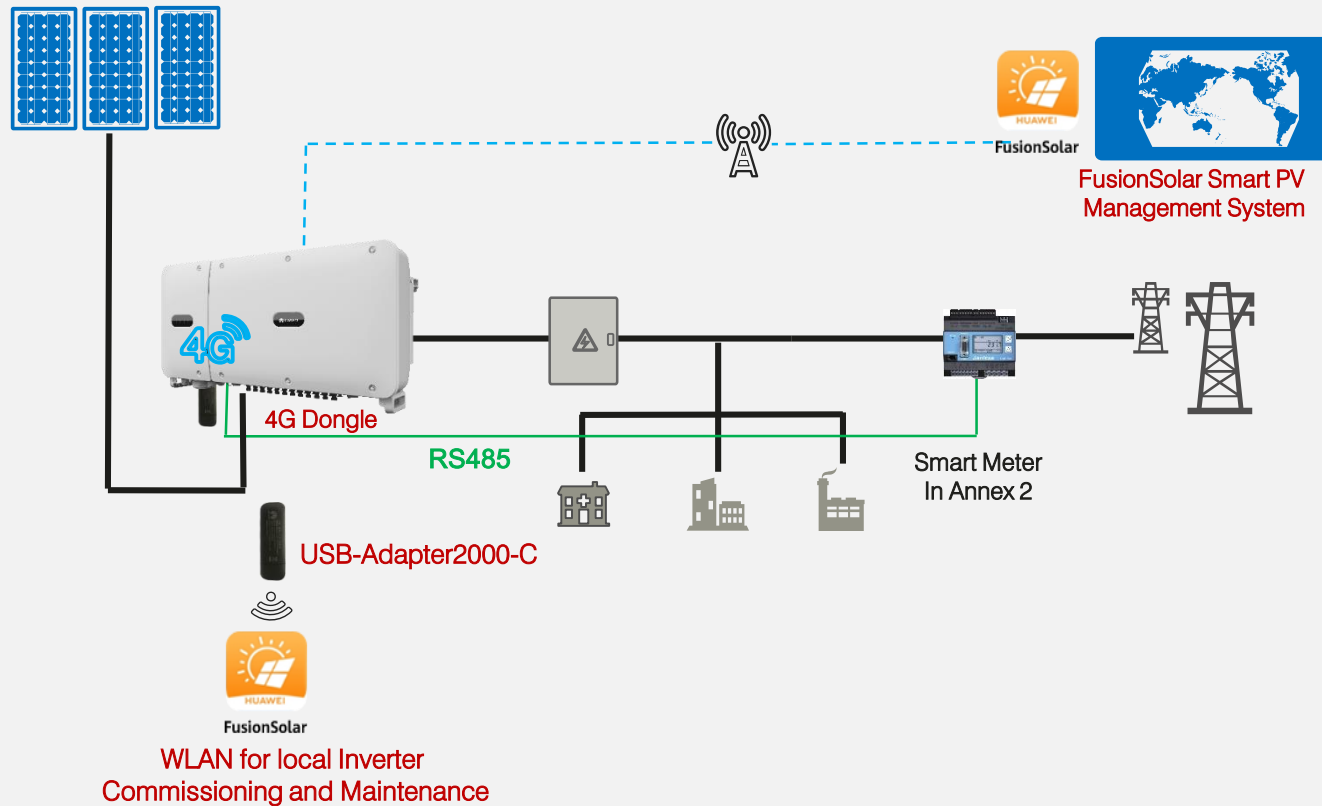
SmartLogger3000A has built-in RRCR (Radio Ripple Control Receiver) interface allows to control the inverter's power production through 4 digital inputs.

SUN2000-36KTL has optional model with AFCI function.

FusionSolar App can be connected to WLAN adapter for maintenance.

# Small Scale C&I Application

SUN2000-50/60KTL-M0 – Single Inverter with Smart Dongle 4G



**Local Commissioning:** FusionSolar App connects to the inverter via USB-Adapter2000-C

**Remote Monitoring:** 4G communication to FusionSolar Smart PV Management System via Smart Dongle 4G

Smart meter (Listed in Annex 2) connects to the inverter via RS485 for power output monitoring or control.

# SUN2000-50/60KTL-M0 – Single Inverter with SmartLogger3000A



- ### Remote Monitoring:

- SmartLogger3000A communicates to FusionSolar Smart PV Management System via Ethernet.
- SmartLogger3000A communicates to FusionSolar Smart PV Management System via built-in 4G.

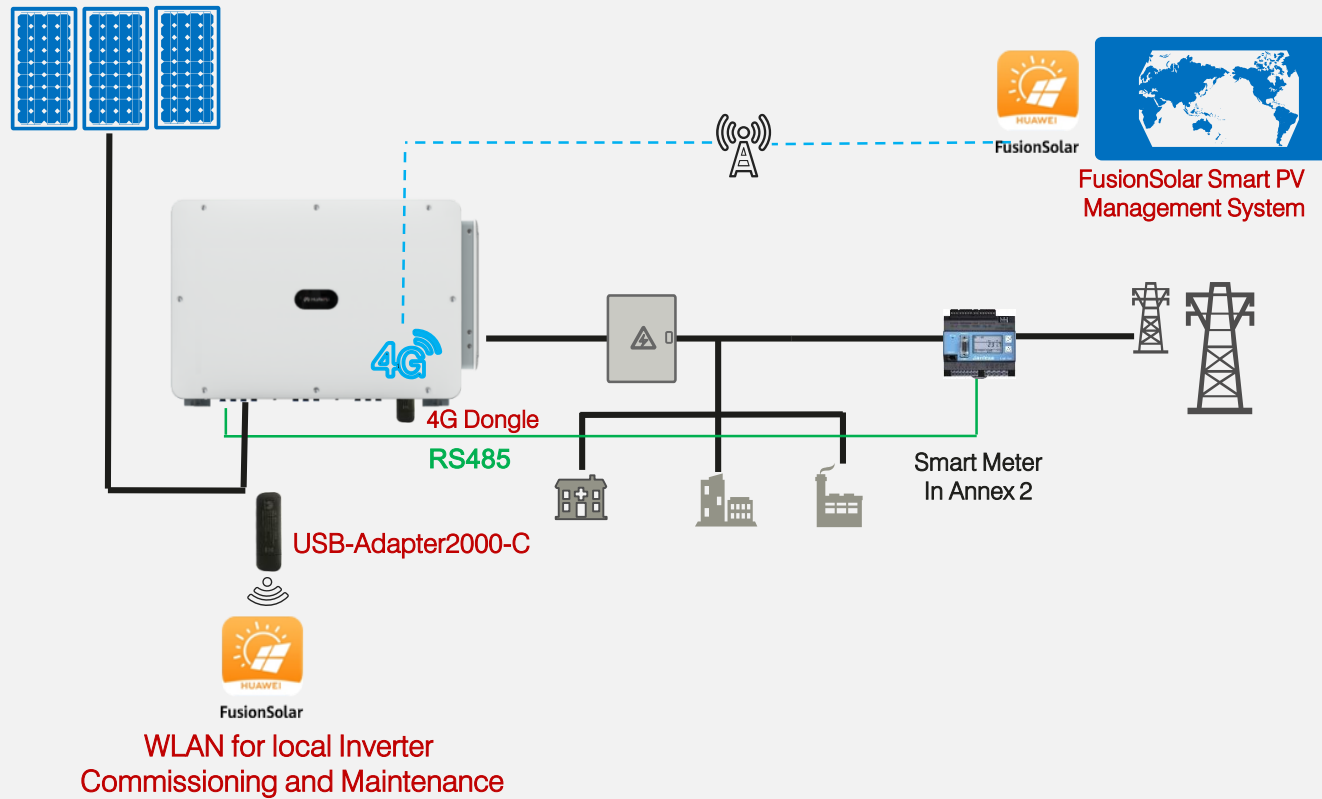
Smart meter (Listed in Annex 1) connects to SmartLogger3000A via RS485 for power output monitoring or control.

SmartLogger3000A has built-in RRCR (Radio Ripple Control Receiver) interface allows to control the inverter's power production through 4 digital inputs. Ripple control receiver will be provided by 3<sup>rd</sup> party.

FusionSolar App can be connected to inverter USB port onsite for maintenance.

# Small Scale C&I Application

SUN2000-100KTL-M1 – Single Inverter with Smart Dongle 4G



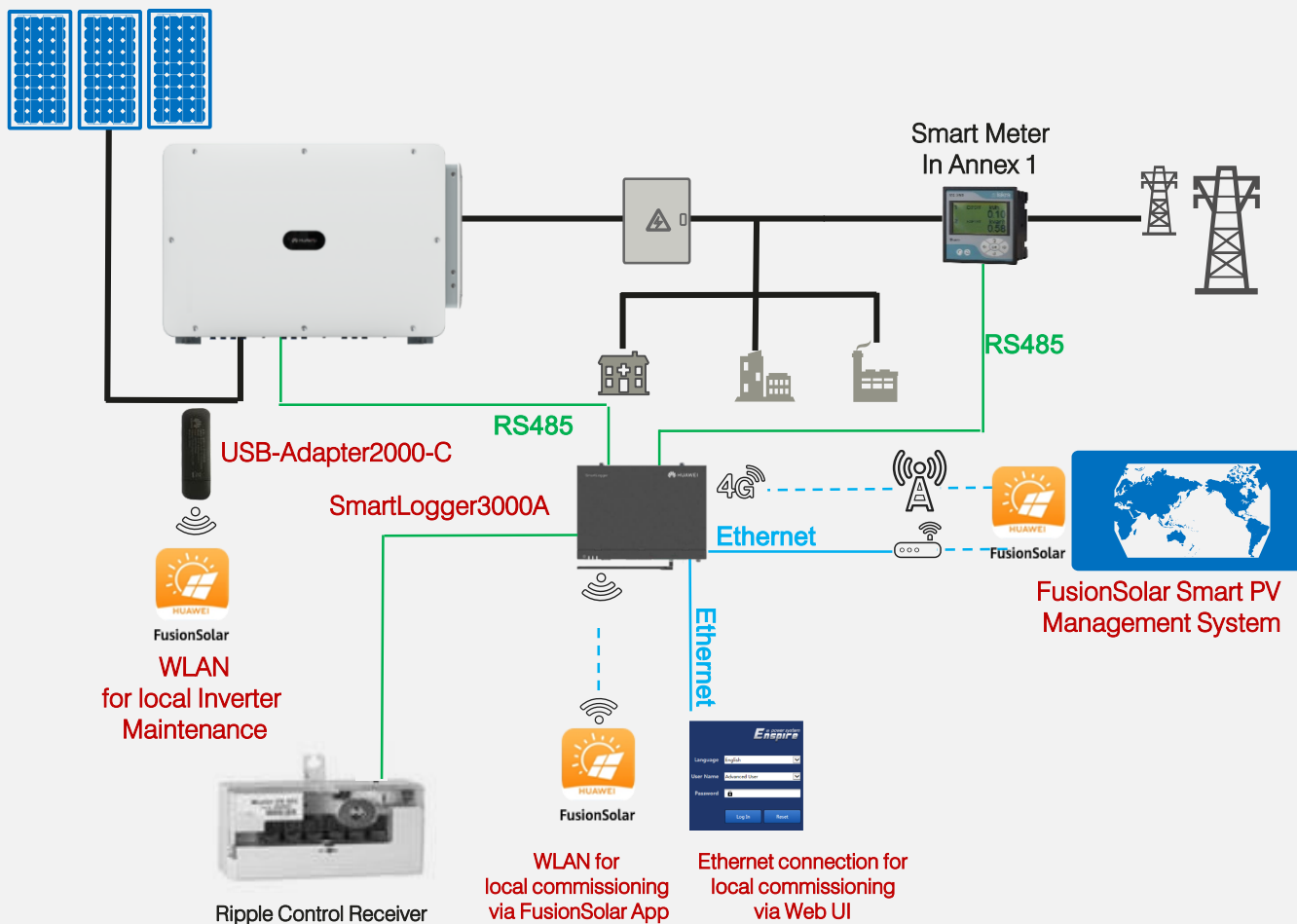
**Local Commissioning:** FusionSolar App connects to the inverter via USB-Adapter2000-C

**Remote Monitoring:** 4G communication to FusionSolar Smart PV Management System via Smart Dongle 4G.

Smart meter (Listed in Annex 2) connects to inverter via RS485 for power output monitoring or control.

# Small Scale C&I Application

SUN2000-100KTL-M1 – Single Inverter with SmartLogger3000A



## Local Commissioning:

- Web UI installed laptop connecting to SmartLogger3000A via its Ethernet port.
- FusionSolar App connecting to SmartLogger3000A via its built-in WLAN communication.

## Remote Monitoring:

- SmartLogger3000A communicates to FusionSolar smart PV management system via Ethernet.
- SmartLogger3000A communicates to FusionSolar smart PV management system via built-in 4G.

Smart meter (Listed in Annex 1) connects to SmartLogger3000A via RS485 for power output monitoring or control.

SmartLogger3000A has built-in RRCR (Radio Ripple Control Receiver) interface allows to control the inverter's power production through 4 digital inputs. Ripple control receiver will be provided by 3<sup>rd</sup> party.

FusionSolar App can be connected to inverter USB port onsite for maintenance.

01 Product Portfolio

02 Small Scale C&I Application (Single Inverter)

03 Medium Scale C&I Application ( $\leq 10$  Inverters)

04 Large Scale C&I Application ( $> 10$  Inverters)

05 Special Application (AFCI, Partial Optimization)

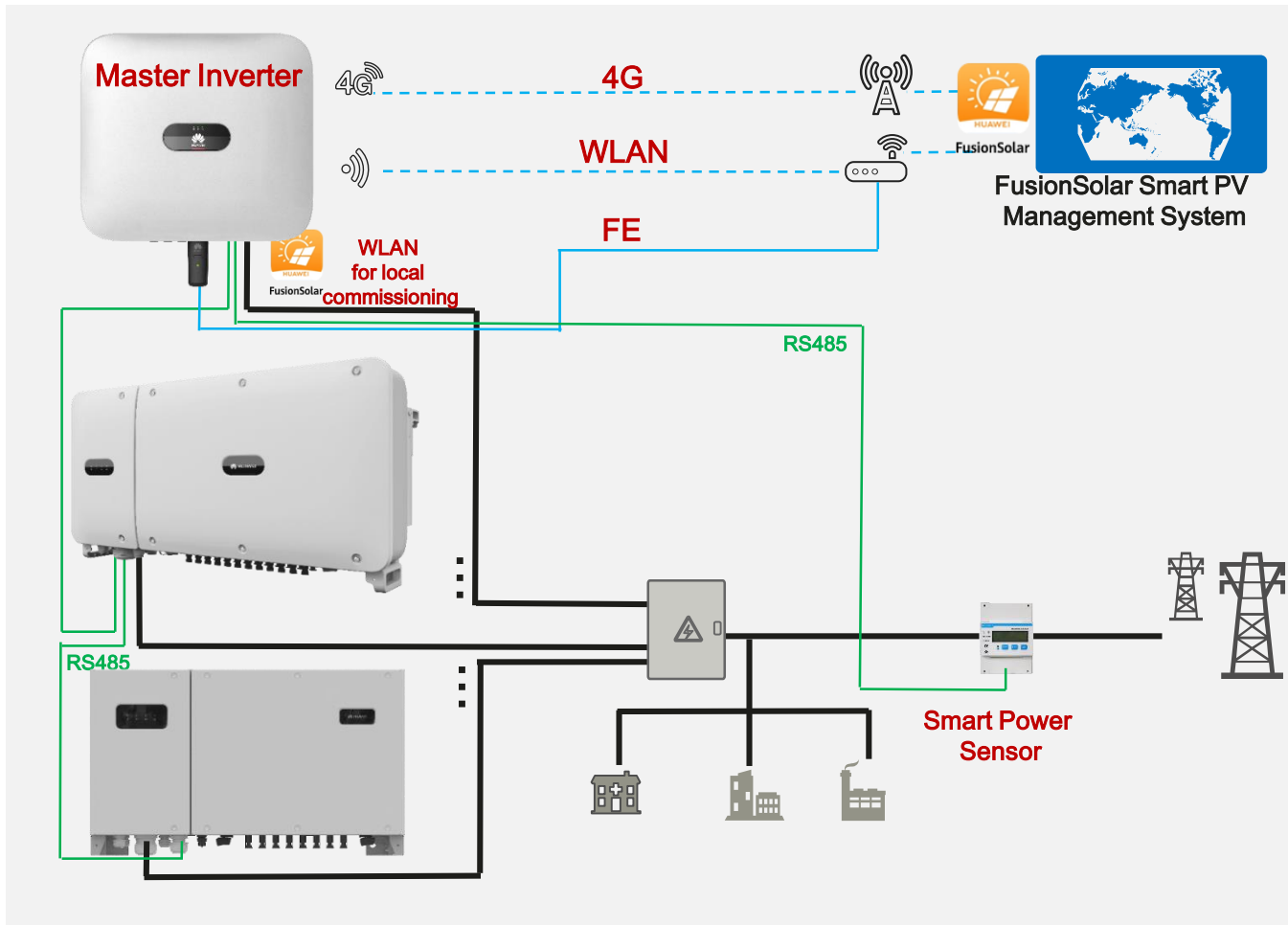
# Medium Scale C&I Application ( $\leq 10$ inverters)

SUN2000-12/15/17/20KTL-M0/M2, 29.9KTL, 33KTL-A, 36KTL, 50/60KTL-M0, 100KTL-M1

Master	Communication	Smart Power Sensor	Mgt. System	AFCI	Ripple Control
SUN2000-12/15/17/20KTL-M0/M2 M0/M2	Smart Dongle WLAN-FE / Smart Dongle 4G (connected to master inverter)	DTSU666-H 250A/50mA (Three Phase)	FusionSolar	Applicable to system only consist consist of SUN2000-12-20KTL- M0/M2, 36KTL (AFCI model) 100KTL-M1 (New version)	Applicable to system only consist of SUN2000- SUN2000-12-20KTL- M0/M2 (Inverter has built-in RRCR interface)
SUN2000-50/60KTL-M0	Smart Dongle 4G (connected to master inverter)	Compatible smart meter listed in Annex 2	FusionSolar	No	No
	SmartLogger3000A	Compatible smart meter listed in Annex 1	FusionSolar	No	Yes (SmartLogger has built-in RRCR interface)
SUN2000-100KTL-M1	Smart Dongle 4G (connected to master inverter)	Compatible smart meter listed in Annex 2	FusionSolar	Applicable to system only consist consist of SUN2000-12-20KTL- M0/M2, 36KTL (AFCI model) 100KTL-M1 (New version)	No
	SmartLogger3000A	Compatible smart meter listed in Annex 1	FusionSolar		Yes (SmartLogger has built-in RRCR interface)

# Medium Scale C&I Application

SUN2000-12-20KTL-M0/M2 as master inverter – Less than or equal to 10 Inverters



Master inverter: SUN2000-12-20KTL-M0/M2

Slave inverters: max 9 inverters are connected.

**Local Commissioning:** FusionSolar App connects to master inverter via built-in WLAN and all slave inverter settings will be synchronized.

**Remote Monitoring:**

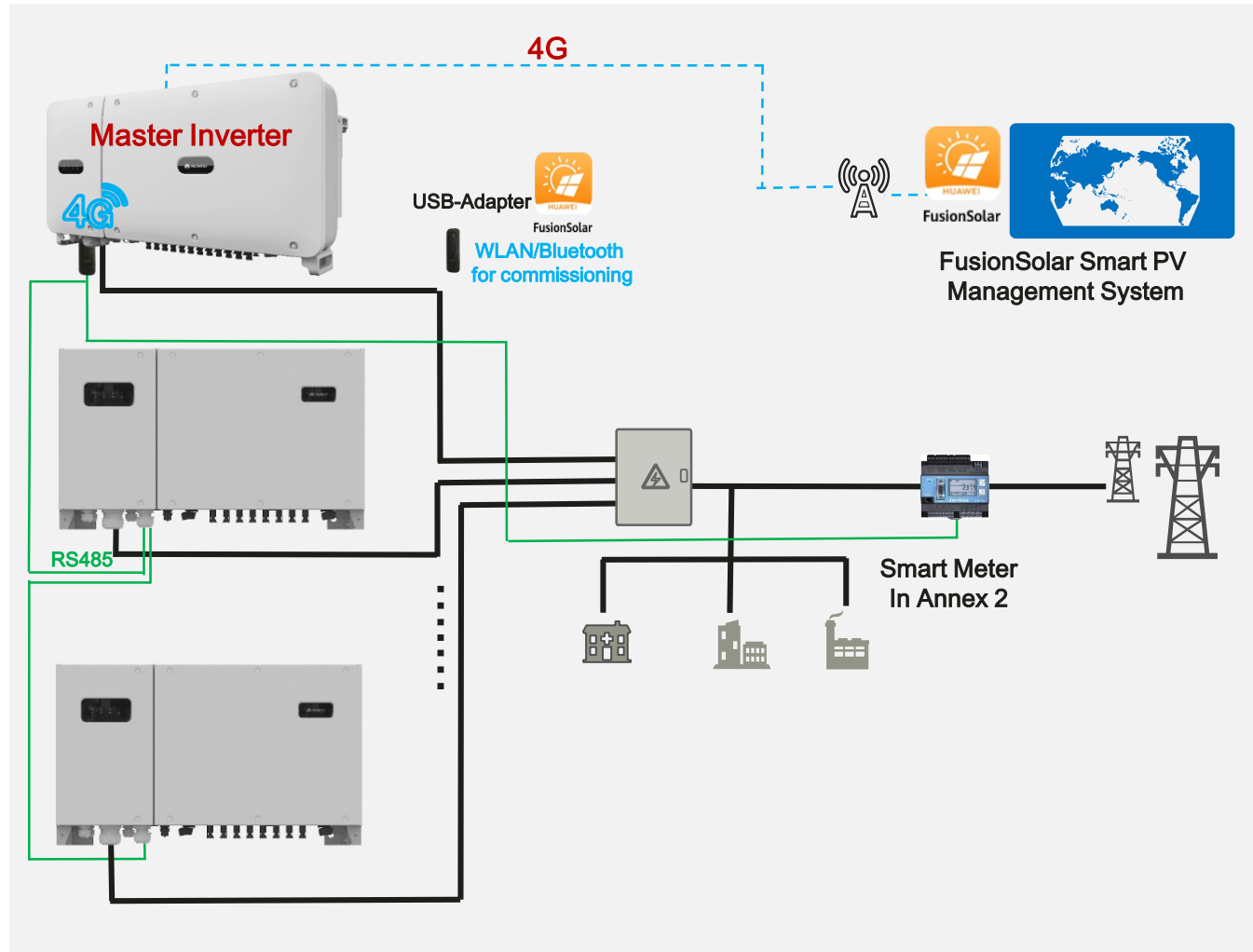
- Optional WLAN or Ethernet communication to FusionSolar Smart PV Management System via Smart Dongle WLAN-FE.
- Optional 4G communication to FusionSolar Smart PV Management System via Smart Dongle 4G.

DTSU666-H 250A/50mA three phase smart power sensor connects to master inverter via RS485 for power output monitoring or control.

System power capacity shall not be higher than 170KW due to the power measurement limit of DTSU666-H 250A/50mA smart power sensor. Future white list power meter will be available 2020.06 without this restriction.

# Medium Scale C&I Application

SUN2000-50/60KTL-M0 as master inverter – Less than or equal to 10 Inverters



Master inverter: SUN2000-50/60KTL-M0

Slave inverters: max 9 inverters are connected.

**Local Commissioning:** FusionSolar App connects to master inverter via USB-Adapter2000-C and all slave inverter settings will be synchronized.

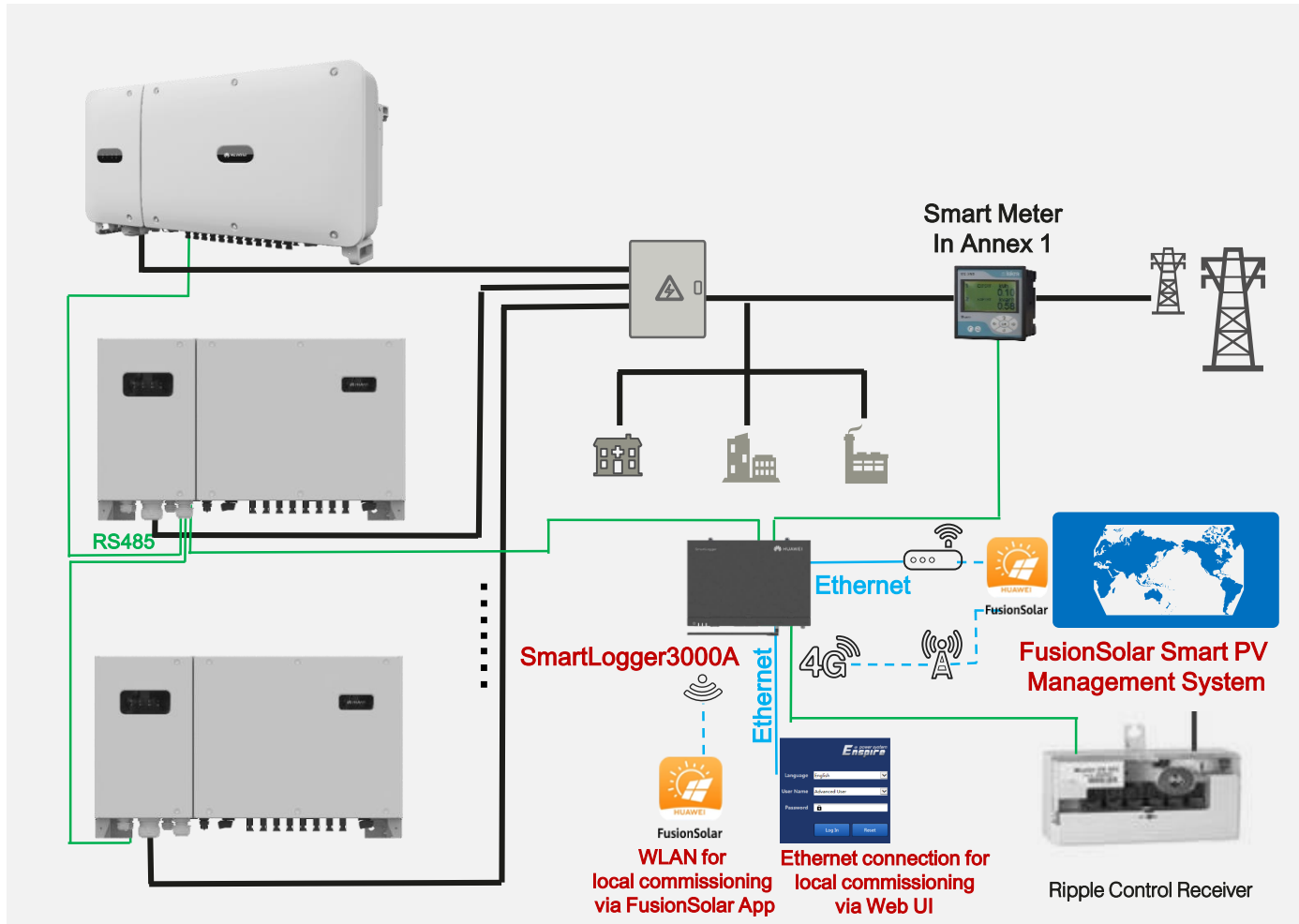
**Remote Monitoring:**

- 4G communication to FusionSolar Smart PV Management System via Smart Dongle 4G.

Smart meter (Listed in Annex 2) connects to master inverter via RS485 for power output monitoring or control.

# Medium Scale C&I Application

SmartLogger3000A as master unit – Less than or equal to 10 Inverters



**Master Unit:** SmartLogger3000A

**Slave inverters:** for the scenario  $\leq 10$  inverters are connected.

(SmartLogger3000A's capability can connect up to 80 inverters)

## Local Commissioning:

- Web UI software installed laptop connecting to SmartLogger3000A via its Ethernet port
- FusionSolar App connecting to SmartLogger3000A via its built-in WLAN communication

## Remote Monitoring:

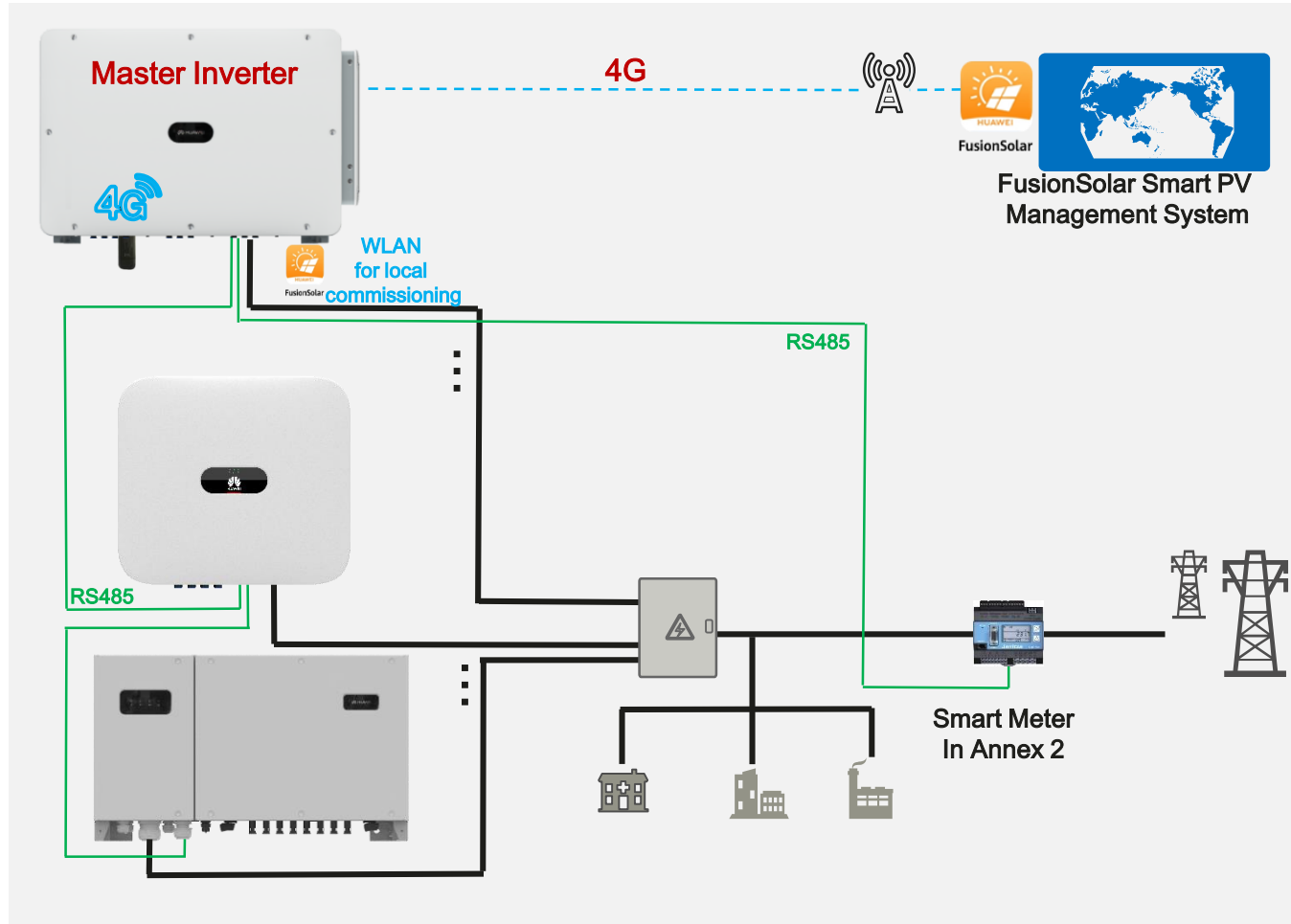
- SmartLogger3000A communicates to FusionSolar Smart PV Management System via Ethernet
- SmartLogger3000A communicates to FusionSolar Smart PV Management System via built-in 4G

Smart meter (Listed in Annex 1) connects to SmartLogger3000A via RS485 for power output monitoring or control. Ripple control receiver will be provided by 3<sup>rd</sup> party.

Four DI of SmartLogger3000A can be used as RRCR (Radio Ripple Control Receiver) interface allows to control the inverter's power production.

# Medium Scale C&I Application

SUN2000-100KTL-M1 as master inverter – Less than or equal to 10 Inverters



Master inverter: SUN2000-100KTL-M1

Slave inverters: max 9 inverters are connected.

**Local Commissioning:** FusionSolar App connects to master inverter via USB-Adapter2000-C and all slave inverter settings will be synchronized.

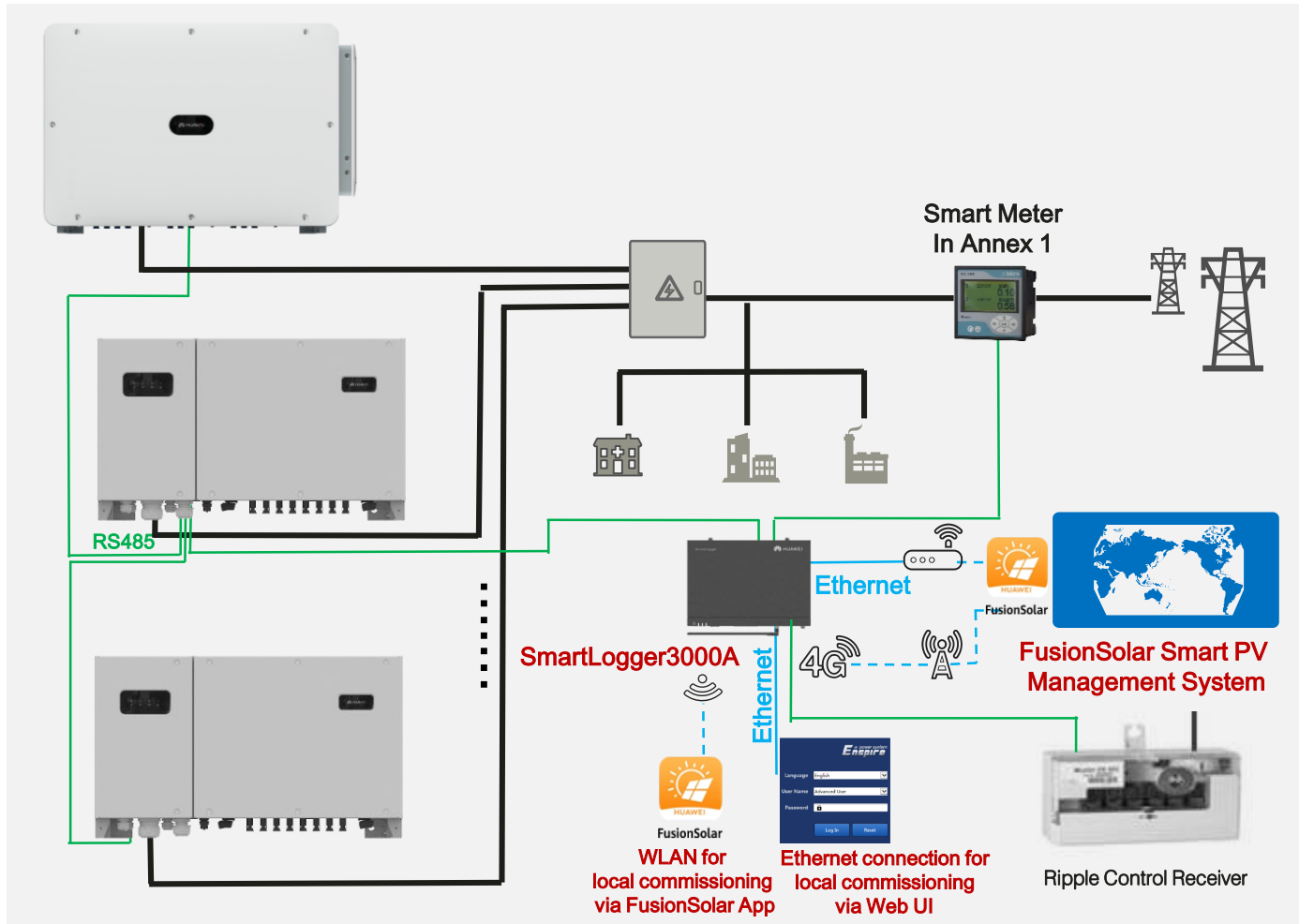
**Remote Monitoring:**

- 4G communication to FusionSolar Smart PV Management System via Smart Dongle 4G connected to master inverter.

Smart meter(Listed in Annex 2) connects to master inverter via RS485 for power output monitoring or control.

# Medium Scale C&I Application

SmartLogger3000A as master unit – Less than or equal to 10 Inverters



**Master Unit:** SmartLogger3000A

**Slave inverters:** for the scenario  $\leq 10$  inverters are connected.  
(SmartLogger3000A's capability can connect up to **80** inverters)

## Local Commissioning:

- FusionSolar App connecting to SmartLogger3000A via its built-in WLAN communication
- Web UI software installed laptop connecting to SmartLogger3000A via its Ethernet port

## Remote Monitoring:

- SmartLogger3000A communicates to FusionSolar Smart PV Management System via Ethernet
- SmartLogger3000A communicates to FusionSolar Smart PV Management System via built-in 4G

Smart meter (Listed in Annex 1) connects to SmartLogger3000A via RS485 for power output monitoring or control.

Four DI of SmartLogger3000A can be used as RRCR (Radio Ripple Control Receiver) interface allows to control the inverter's power production. Ripple control receiver will be provided by 3<sup>rd</sup> party.

01 Product Portfolio

02 Small Scale C&I Application (Single Inverter)

03 Medium Scale C&I Application ( $\leq 10$  Inverters)

04 Large Scale C&I Application ( $> 10$  Inverters)

05 Special Application (AFCI, Partial Optimization)

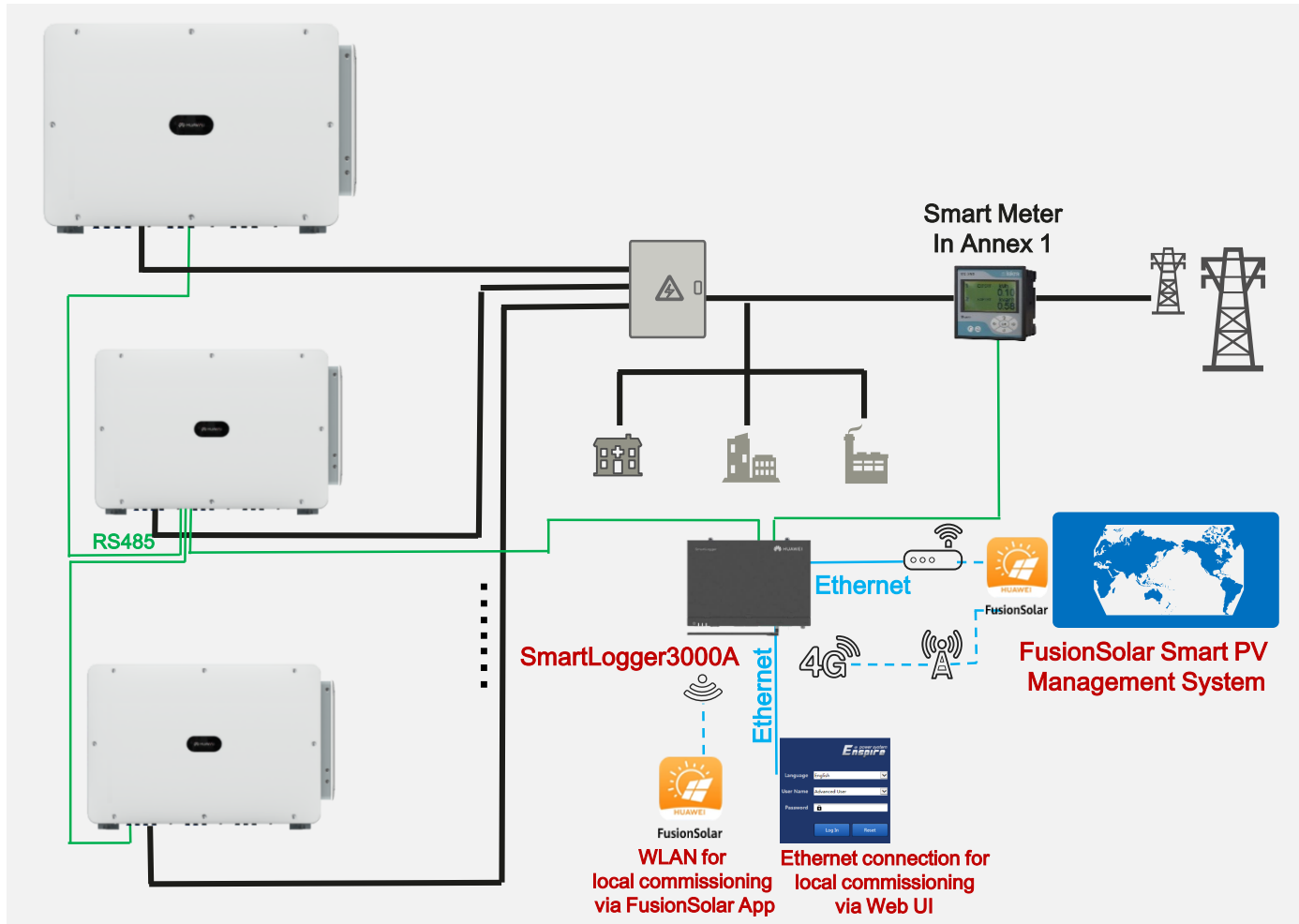
# Large Scale C&I Application (>10 Inverters)

SUN2000-12/15/17/20KTL-M0/M2, 29.9KTL, 33KTL-A, 36KTL, 50/60KTL-M0, 100KTL-M1

Master	Slave	Communication	Smart Power Sensor	Mgt. System	AFCI	Ripple Control
SmartLogger3000A	SUN2000-12-20KTL-M0/M2 SUN2000-29.9/33/36KTL SUN2000-50/60KTL-M0 SUN2000-100KTL-M1	SmartLogger3000A	Compatible smart meter listed in Annex 1	FusionSolar	No	Yes

# Large Scale C&I Application

SmartLogger3000A as master unit – Less than or equal to 80 Inverters



**Master Unit:** SmartLogger3000A

**Slave inverters:** max **80** inverters are connected.

## Local Commissioning:

- Web UI software installed laptop connecting to SmartLogger3000A via its Ethernet port
- FusionSolar App connecting to SmartLogger3000A via its built-in WLAN communication

## Remote Monitoring:

- SmartLogger3000A communicates to FusionSolar Smart PV Management System via Ethernet
- SmartLogger3000A communicates to FusionSolar Smart PV Management System via built-in 4G

Smart meter (Listed in Annex 1) connects to SmartLogger3000A via RS485 for power output monitoring or control.

Four DI of SmartLogger3000A can be used as RRCR (Radio Ripple Control Receiver) interface allows to control the inverter's power production.

01 Product Portfolio

02 Small Scale C&I Application (Single Inverter)

03 Medium Scale C&I Application ( $\leq 10$  Inverters)

04 Large Scale C&I Application ( $> 10$  Inverters)

05 Special Application (AFCI, Partial Optimization)

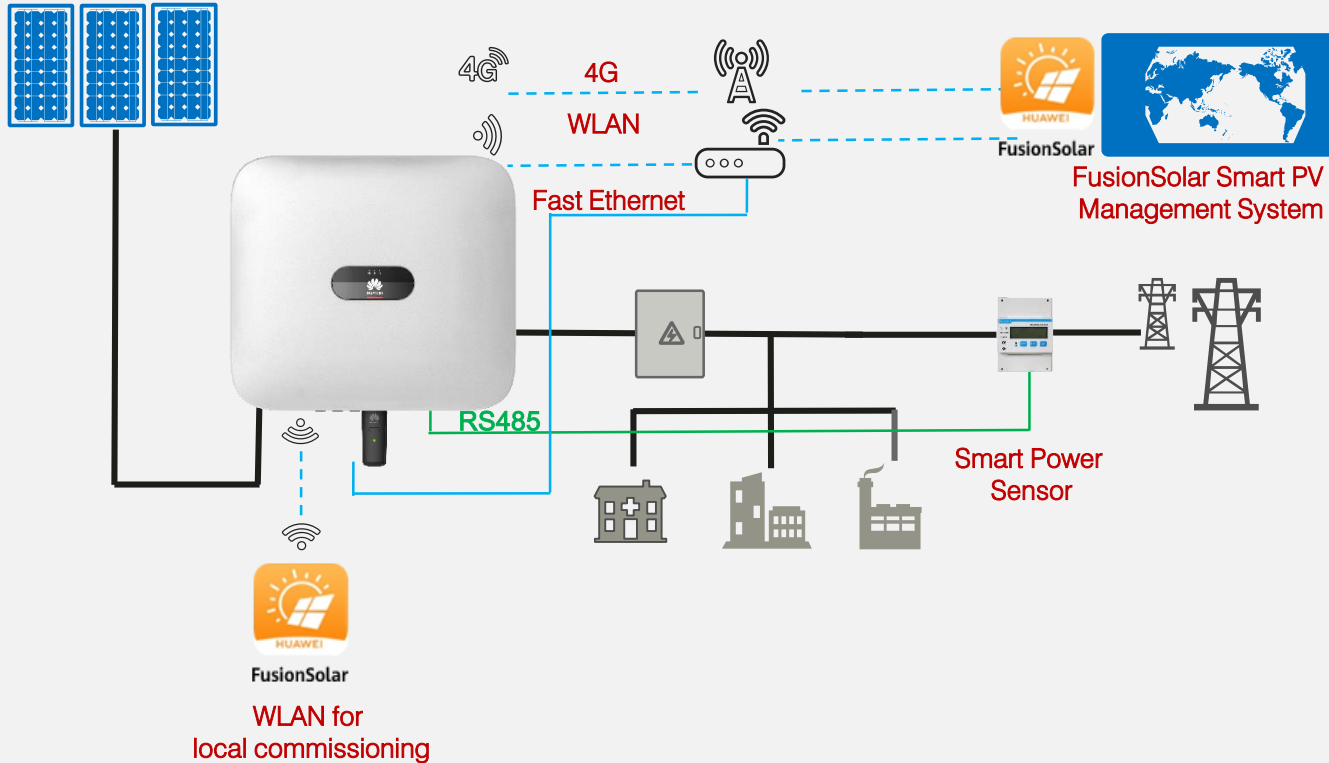
# C&I AFCI Solution

SUN2000-12/15/17/20KTL-M0/M2, 36KTL (AFCI model), 100KTL-M1

Master	Slave	Communication	Smart Power Sensor	Mgt. System	AFCI
SUN2000-12/15/17/20KTL-M0/M2 M0/M2	/	Smart Dongle WLAN-FE	DTSU666-H 250A/50mA (Three Phase)	FusionSolar	Yes
SUN2000-36KTL (AFCI model)	/	SmartLogger3000A	Compatible smart meter listed	FusionSolar	Yes
SUN2000-100KTL-M1	/	Smart Dongle 4G	Compatible smart meter listed	FusionSolar	Yes (New version)
SUN2000-12/15/17/20KTL-M0/M2 M0/M2	SUN2000-12-20KTL-M0/M2, 36KTL (AFCI model) 100KTL-M1 (New version)	Smart Dongle WLAN-FE	DTSU666-H 250A/50mA (Three Phase)	FusionSolar	Yes
SmartLogger3000A	36KTL (AFCI model) SUN2000-12-20KTL-M0/M2, 100KTL-M1 (New version)	SmartLogger3000A	Compatible smart meter listed in Annex 1	FusionSolar	Yes

# C&I AFCI Solution

SUN2000-12/15/17/20KTL-M0/M2 – Single Inverter



**Local Commissioning:** Inverter built-in WLAN communicates to FusionSolar App.

## Remote Monitoring

- Optional WLAN or Ethernet communication to FusionSolar Smart PV Management System via Smart Dongle WLAN-FE.
- Optional 4G communication to FusionSolar Smart PV Management System via Smart Dongle 4G.

DTSU666-H 250A/50mA three phase smart power sensor connects to inverter via RS485 for power output monitoring or control.

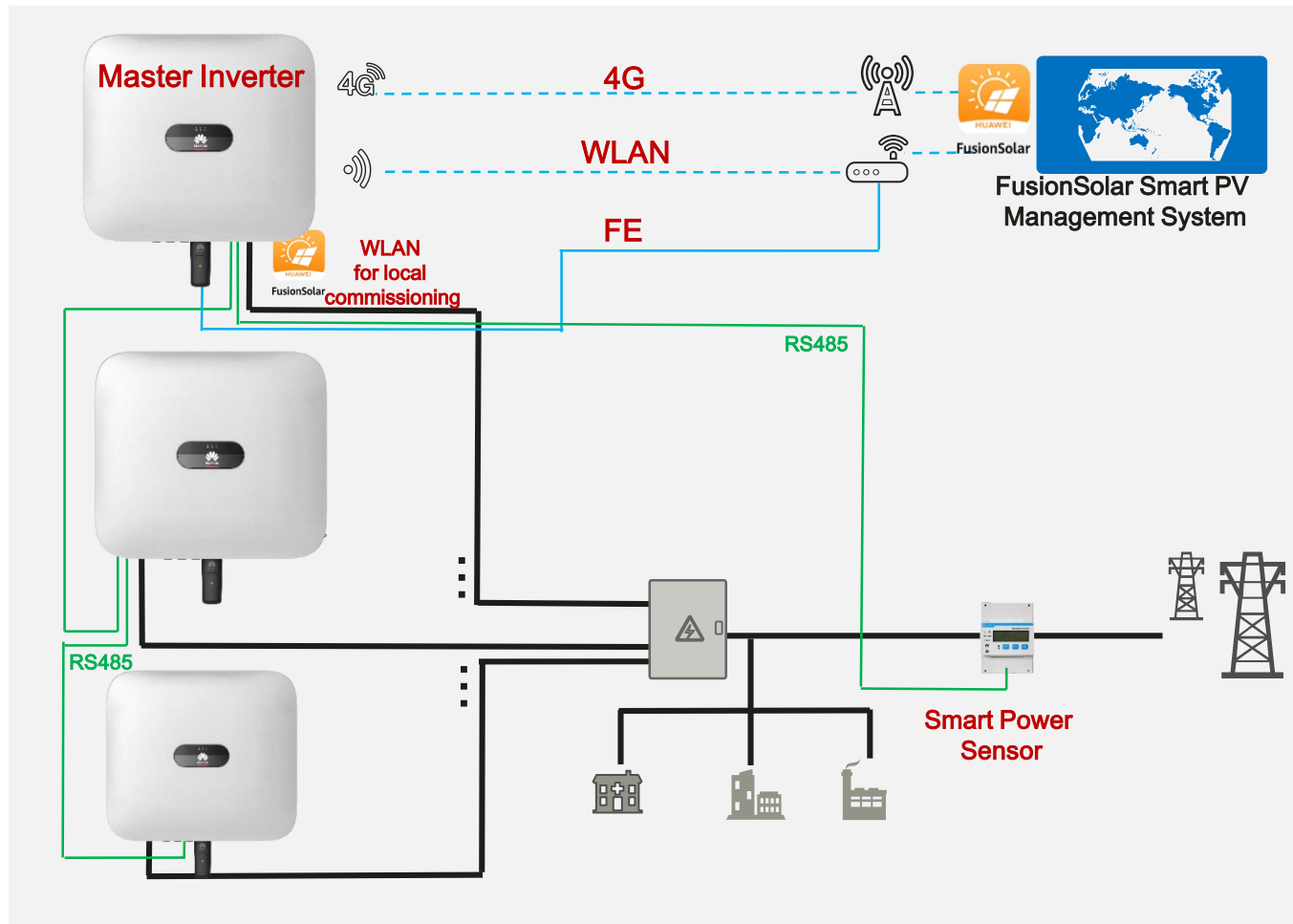
Built-in RRCR (Radio Ripple Control Receiver) interface allows to control the inverter's power production through 4 digital inputs.

AFCI function to mitigate fire risk.

PID recovery for better module performance.

# C&I AFCI Solution

SUN2000-12-20KTL-M0/M2 as master inverter – Less than or equal to 10 Inverters



**Master inverter:** SUN2000-12-20KTL-M2

**Slave inverters:** max **9** inverters are connected.

**Local Commissioning:** FusionSolar App connects to master inverter via built-in WLAN and all slave inverter settings will be synchronized.

**Remote Monitoring:**

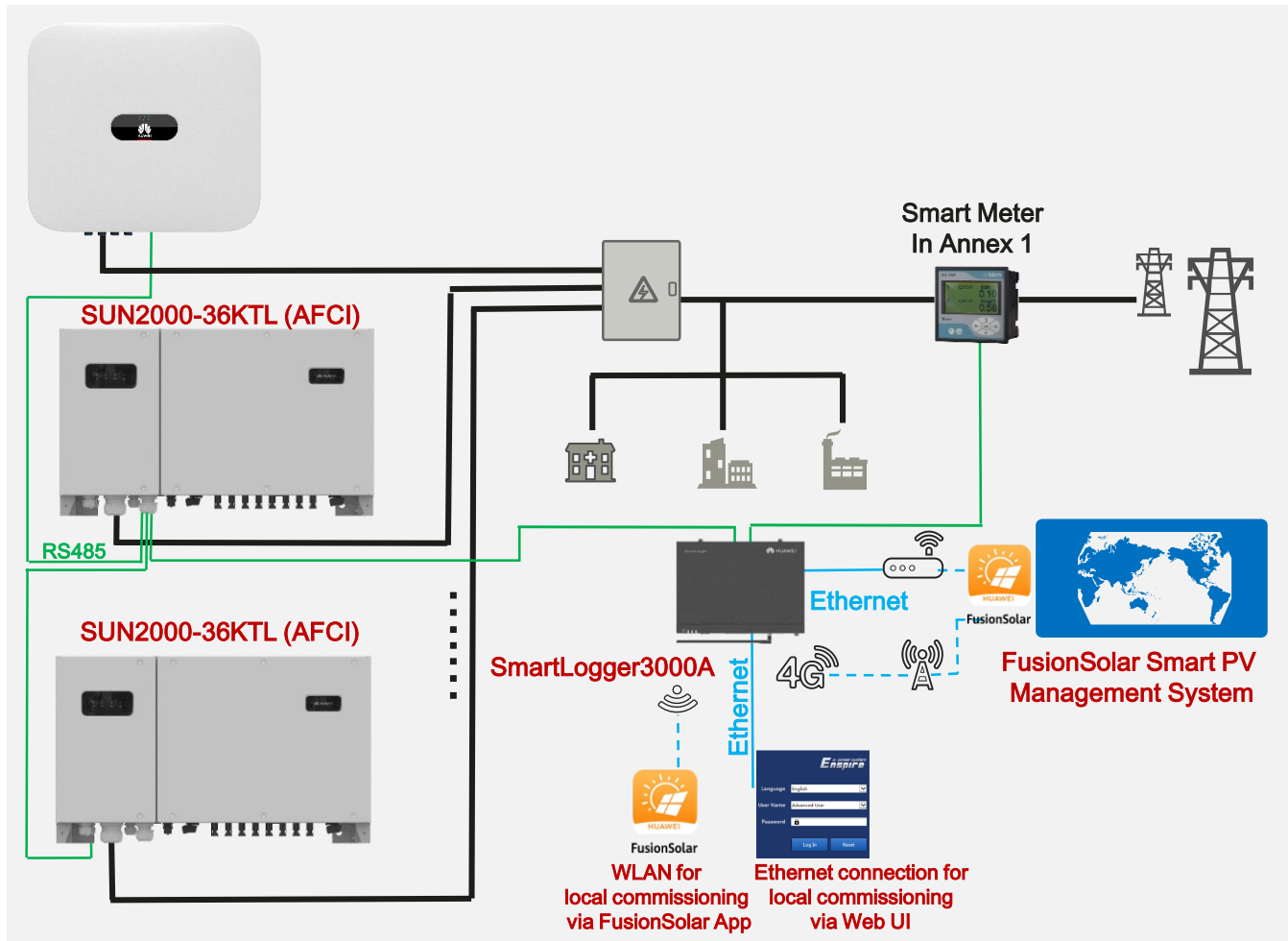
- Optional WLAN or Ethernet communication to FusionSolar Smart PV Management System via Smart Dongle WLAN-FE.
- Optional 4G communication to FusionSolar Smart PV Management System via Smart Dongle 4G.

DTSU666-H 250A/50mA three phase smart power sensor connects to master inverter via RS485 for power output monitoring or control.

System power capacity shall not be higher than 170KW due to the power measurement limit of DTSU666-H 250A/50mA smart power sensor. Future white list power meter will be available 2020.06 without this restriction.

# C&I AFCI Solution

SmartLogger3000A as master unit – Less than or equal to 80 Inverters



**Master Unit:** SmartLogger3000A

**Slave inverters:** max **80** inverters are connected.

**Supported inverters:** 12-20KTL-M2, 36KTL (AFCI), 100KTL-M1 (New version)

**Local Commissioning:**

- FusionSolar App connecting to SmartLogger3000A via its built-in WLAN communication
- Web UI software installed laptop connecting to SmartLogger3000A via its Ethernet port

**Remote Monitoring:**

- SmartLogger3000A communicates to FusionSolar smart PV management system via Ethernet
- SmartLogger3000A communicates to FusionSolar smart PV management system via built-in 4G

Smart meter (Listed in Annex 1) connects to SmartLogger3000A via RS485 for power output monitoring or control.

Four DI of SmartLogger3000A can be used as RRCR (Radio Ripple Control Receiver) interface allows to control the inverter's power production.

# C&I Partial Optimization Solution

SUN2000-12/15/17/20KTL-M2 with full optimizers

Master	Slave	Optimizer	Communication	Smart Power Sensor	Mgt. System	Partial Optimization
SUN2000-12/15/17/20KTL-12/15/17/20KTL-M2	SUN2000-12-20KTL-M0/M2 SUN2000-29.9/33/36KTL SUN2000-50/60KTL-M0 SUN2000-100KTL-M1	SUN2000-450W-P ,full optimizers for SUN2000-12-20KTL-M2	Smart Dongle WLAN-	DTSU666-H 250A/50mA (Three Phase)	FusionSolar	Yes
SUN2000-50/60KTL-M0	Must include SUN2000-12-20KTL-M2	SUN2000-450W-P ,full optimizers for SUN2000-12-20KTL-M2	Smart Dongle 4G	Compatible smart meter listed in Annex 2	FusionSolar	Yes
SmartLogger3000A	Must include SUN2000-12-20KTL-M2	SUN2000-450W-P ,full optimizers for SUN2000-12-20KTL-M2	SmartLogger3000A	Compatible smart meter listed in Annex 1	FusionSolar	Yes

SUN2000-12/15/17/20KTL-M2 full optimizers for modules under shaded area



**Optimizers:** SUN2000-450W-P, full optimizers for SUN2000-12-20KTL-M2, accurately optimize the modules under shading for higher yields. Other inverters do not need to install optimizers for Capex saving.

**Local Commissioning:** FusionSolar App connects to master inverter via built-in WLAN and all slave inverter settings will be synchronized.

### Remote Monitoring:

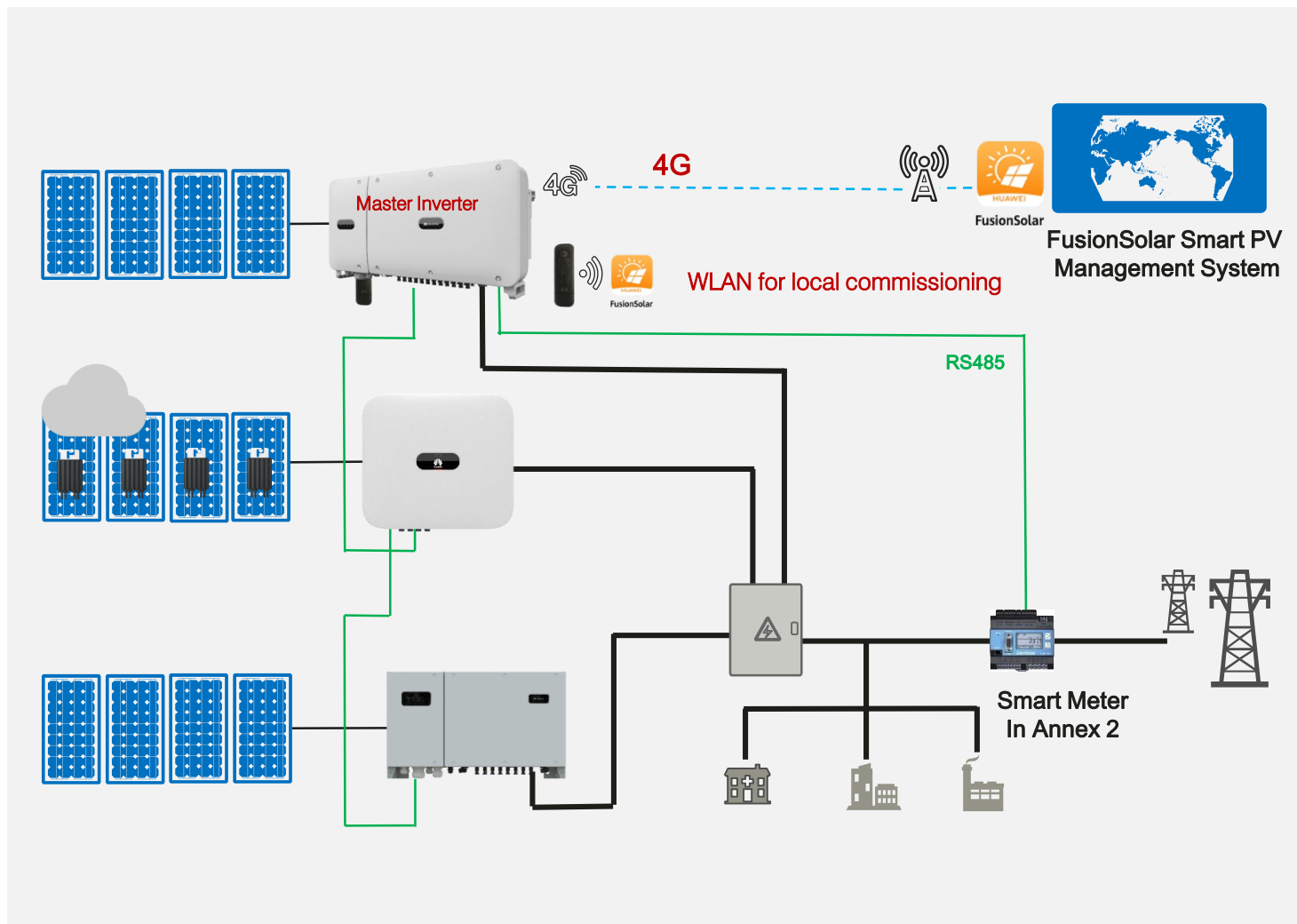
- Optional WLAN or Ethernet communication to FusionSolar Smart PV Management System via Smart Dongle WLAN-FE.
- Optional 4G communication to FusionSolar Smart PV Management System via Smart Dongle 4G.

DTSU666-H 250A/50mA three phase smart power sensor connects to master inverter via RS485 for power output monitoring or control.

System power capacity shall not be higher than 170KW due to the power measurement limit of DTSU666-H 250A/50mA smart power sensor. Future white list power meter will be available 2020.06 without this restriction.

# C&I Partial Optimization Solution

SUN2000-12/15/17/20KTL-M2 full optimizers for modules under shaded area



**Master inverter:** SUN2000-50/60KTL-M0

**Slave inverters:** max **9** inverters are connected.

**Optimizers:** SUN2000-450W-P, **full optimizers for SUN2000-12-20KTL-M2**, accurately optimize the modules under shading for higher yields. Other inverters do not need to install optimizers for Capex saving.

**Local Commissioning:** FusionSolar App connects to the inverter via USB-Adapter2000-C

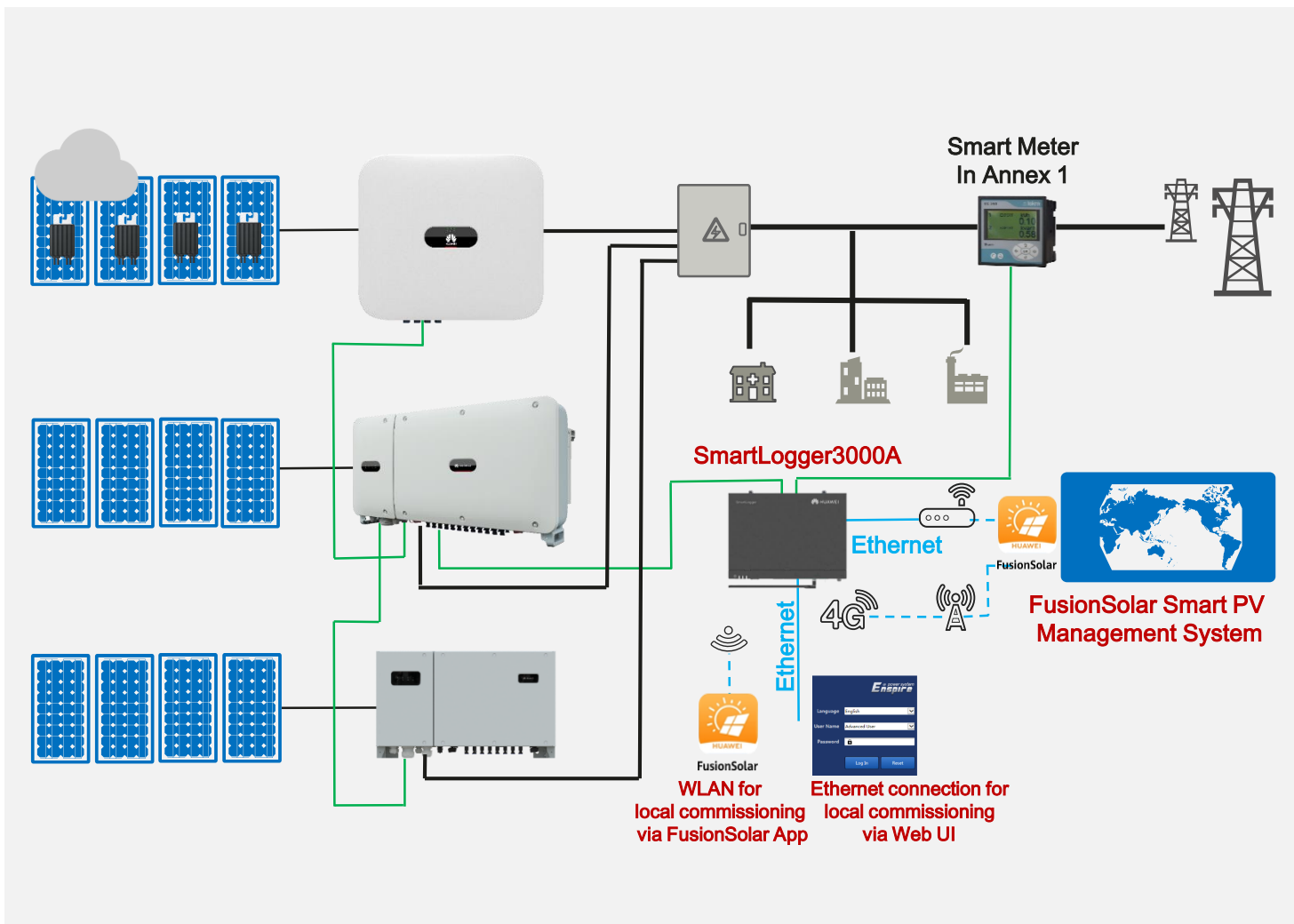
**Remote Monitoring:**

- Optional 4G communication to FusionSolar Smart PV Management System via Smart Dongle 4G.

Smart meter (Listed in Annex 2) connects to master inverter via RS485 for power output monitoring or control.

# C&I Partial Optimization Solution

SUN2000-12/15/17/20KTL-M2 full optimizers for modules under shaded area



**Master Unit:** SmartLogger3000A

**Slave inverters:** max **80** inverters are connected.

**Optimizers:** SUN2000-450W-P, **full optimizers for SUN2000-12-20KTL-M2**, accurately optimize the modules under shading for higher yields. Other inverters do not need to install optimizers for Capex saving.

**Local Commissioning:**

- FusionSolar App connecting to SmartLogger3000A via its built-in WLAN communication
- Web UI software installed laptop connecting to SmartLogger3000A via its Ethernet port

**Remote Monitoring:**

- SmartLogger3000A communicates to FusionSolar smart PV management system via Ethernet
- SmartLogger3000A communicates to FusionSolar smart PV management system via built-in 4G

Smart meter (Listed in Annex 1) connects to SmartLogger3000A via RS485 for power output monitoring or control.

Four DI of SmartLogger3000A can be used as RRCR (Radio Ripple Control Receiver) interface allows to control the inverter's power production.

# Appendix 1: Compatible Smart Power Meter for SmartLogger3000A

Manufacturer	Model	Zero Export
ABB	A44	-
Acrel	PZ96L	Supported
algodue	UPM209	Supported
CHNT	DTSU666	-
CHNT	DTSU666-H	Supported
Elster	A1800ALPHA	-
GIMAC-i	MODBUS ENG MAP(120613)	-
Iskra	MC320	-
Iskra	MC774	-
Janitza	UMG604/UMG103/UMG104	Supported
Lead	LD-C83	-
MingHua	CRDM-830	-
Mitsubishi	LMS-0441E	-
NARUN	PD510	-
Netbiter	CEWE	-
People	RM858E	-
PowerLogic	ION6200	-
PowerLogic	ION7600ION7550/ION7600	-
SATEC	PM130 PLUS	-
Schneider	iEM3000 series	-
Schneider	PM1000	-
Schneider	PM1200	-
SFERE	PD194Z	-
Socomec	COUNTIS E43	Supported (Note: the meter cannot support the imbalance load imbalance load scenario)
Toshiba	S2MS	-
weisheng	DSSD331	-

## Appendix 2: Compatible Smart Power Meter for 50/60KTL-M0, 100KTL-M1

Manufacturer	Model	Zero Export
Huawei	DTSU666-H 250A/50mA	Supported, System power capacity shall not be higher than than 170KW due to the power measurement limit of DTSU666-H DTSU666-H 250A/50mA smart power sensor.
Janitza	JANITZA-UMG604	Not Supported
Janitza	JANITZA-UMG103	Supported
Janitza	JANITZA-UMG104	Not Supported

## Appendix 3: Compatible Weather Stations

Manufacturer	Model	Collected Information
Kipp&Zonen	SMPx	Wind speed Wind direction Module surface temperature Environment temperature Irradiation intensity Daily radiation Connected device status
Jinzhou Lichen	JZLC	
Hukseflux	Hukseflux_SRx	
Gill	Gill_MetPak-Pro	
Rainwise	Pvmet-200	
Ingenieurbüro	Si-RS485TC	
Soluzione_Solare	SunMeter	
Handan	RYQ-3	
Lufft	Lufft_WSx-UMB	
Rainwise	Pvmet-150	
Meteocontrol	SR20-D2	
YANGGUANG	PC-4	
ABB	ABB_VSN800-12	
ABB	ABB_VSN800-14	

# C&I Full Product Portfolio & Main Feature Difference Matrix



Main Feature Difference	SUN2000-12-20KTL-M0	SUN2000-12-20KTL-M2	SUN2000-29.9/33/36KTL	SUN2000-50/60KTL-M0	SUN2000-100KTL-M1
MPPT/Inputs	2/4	2/4	4/8	6/12	10/20
Arc fault circuit interrupter (AFCI)	✓	✓	✓ (only 36kti)		New version support
Integrated PID recovery		✓			New version support
Smart I-V Curve Diagnosis	✓	✓	✓	✓	✓
Support Smart Dongle 4G	✓	✓		✓	✓
Support Smart Dongle WLAN-FE	✓	✓			