

TS4: Commissioning Overview



Commissioning of PV Systems with TS4



The TS4 commissioning process may differ depending on the type of system.
Only use one of the methods:

External Cloud Connect Advanced (CCA)

- TS4 commissioning via Tigo Portal and Tigo Smart App
- Up to 7 gateways per CCA



Integrated Cloud Connect functionality

- TS4 commissioning via integrated inverter WebUI
- Up to 3 gateways per inverter



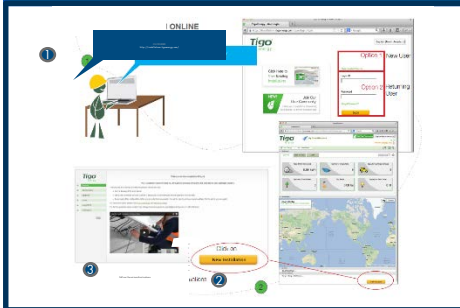
- Only use the inverter WebUI and Sunny Portal

TS4 commissioning with external Cloud Connect CCA

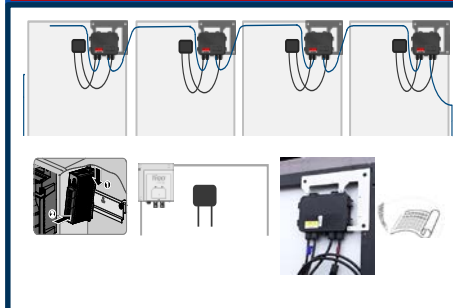


1. Preparation in Tigo Portal or via Tigo Smart App:

- Location
- Equipment



2. Installation Cloud Connect Advanced (CCA), Gateways & TS4-R

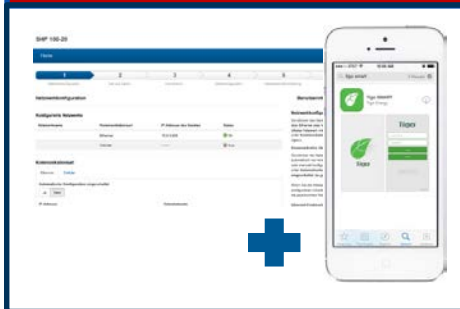


3. Creation of layout plan of TS4

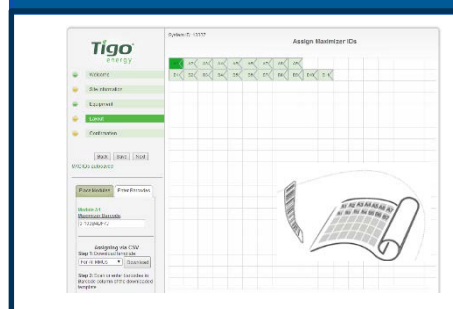


4. Commissioning

- Inverter
- TS4 / Discovery



5. System layout in Tigo Portal or via Tigo Smart App



6. Registration Sunny Portal



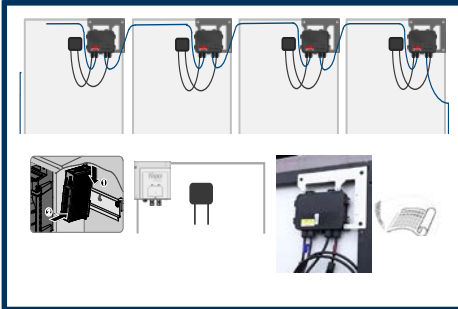
In the office

Onsite

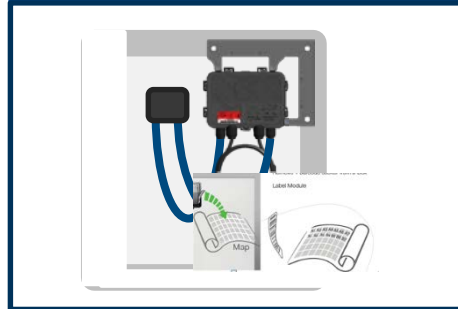
TS4 commissioning with integrated Cloud Connect



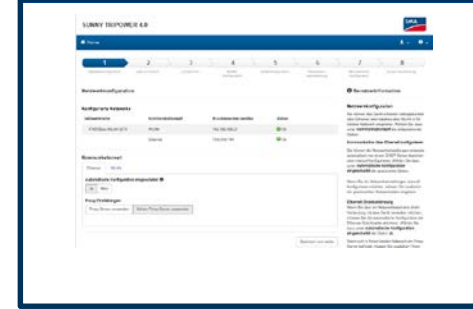
1. Installation of gateways & TS4-R



2. Creation of layout plan



3. Commissioning via inverter WebUI



4. Registration of PV system in Sunny Portal

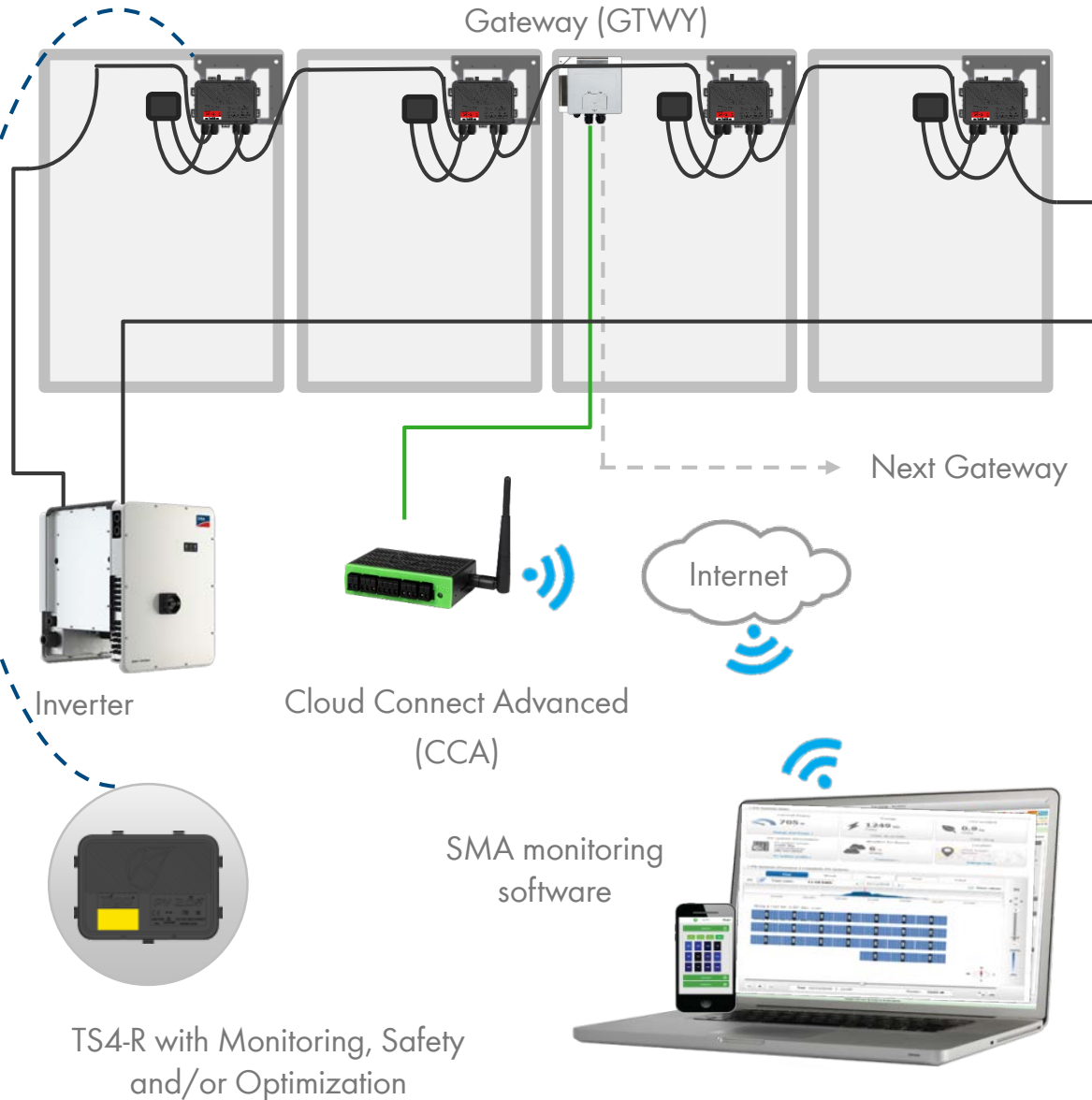
- Layout



In the office

Onsite

SYSTEM OVERVIEW: with external CCA



DESIGN RULES:

1 CLOUD CONNECT ADVANCED (CCA):

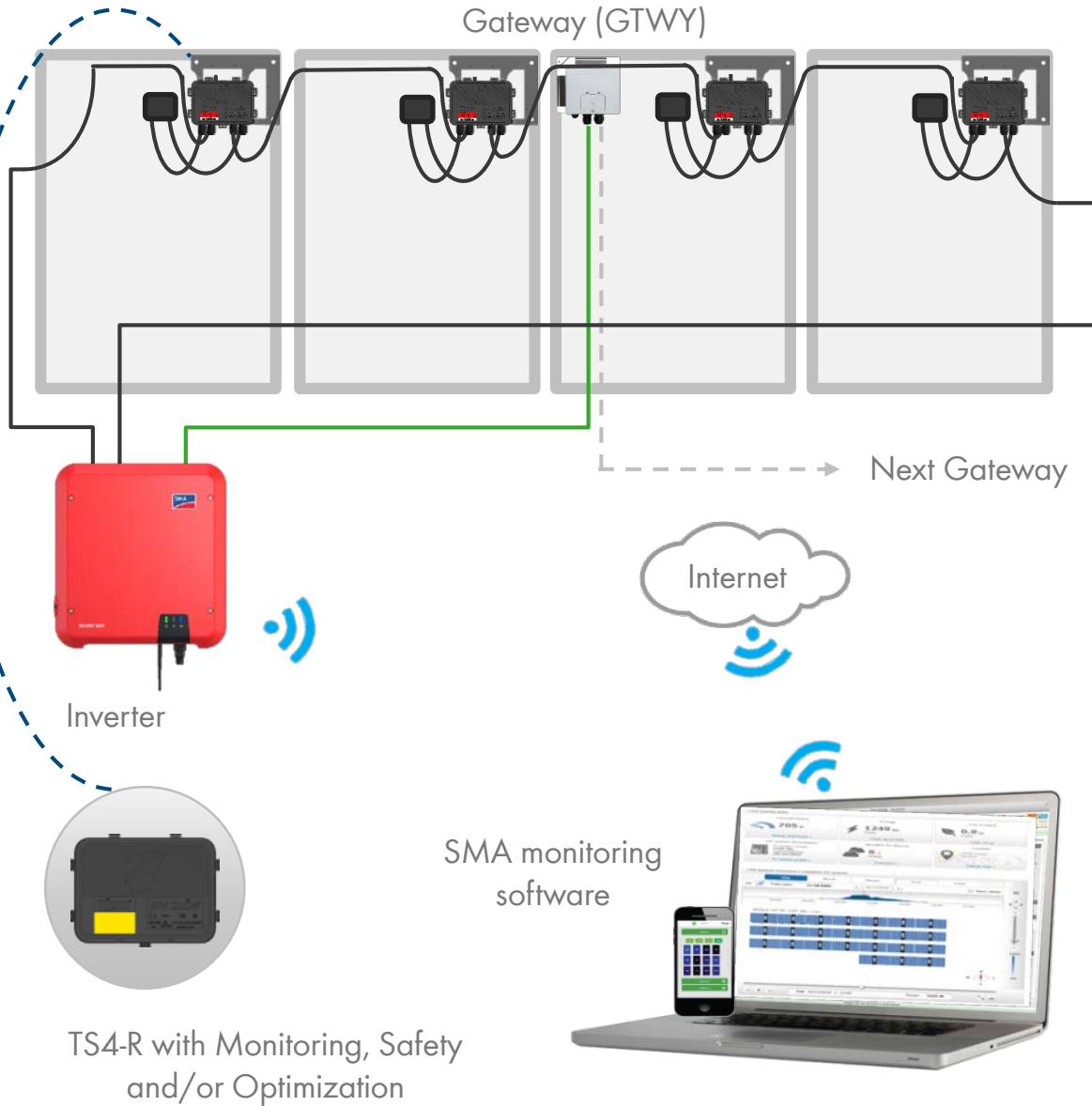
- Up to 7 GTWYs and 360 PV modules
- All smart modules in the same string must be assigned to the same CCA.

1 GATEWAY (GTWY):

- Up to 120 PV modules
- Modules must be within a radius of up to 10 m(33 ft.) of the GTWY, depending on roof topology and material

For further information [CLICK HERE](#)

SYSTEM OVERVIEW: with integrated Cloud Connect



DESIGN RULES:

1 CLOUD CONNECT ADVANCED (CCA):

- Up to **3** GTWYs and 360 PV modules
- All smart modules in the same string must be assigned to the same CCA.

1 GATEWAY (GTWY):

- Up to 120 PV modules
- Modules must be within a radius of up to 15 m (50 ft.) of the GTWY, depending on roof topology and material

SYSTEM OVERVIEW & PRODUCT DESCRIPTION



TS4-M: MONITORING: The TS4-M provides continuous monitoring of registered PV systems and supports operation of all existing PV systems.



Monitoring



TS4-S: SAFETY: The TS4-S provides the necessary safety and monitoring services required by municipalities.



Monitoring



Safety



TS4-O: OPTIMIZATION: In addition to safety, monitoring, and PV2.0 synchronization, TS4-O optimizes each PV module when its performance is affected by shade or mismatch



Monitoring



Safety



Optimization

