

SMA Monitoring Options (current products)

Relevant Products:

SMA SB3.0-1SP-US-41, SMA SB3.8-1SP-US-41, SMA SB5.0-1SP-US-41, SMA SB6.0-1SP-US-41,
SMA SB7.0-1SP-US-41, SMA SB7.7-1SP-US-41,
SMA STP33-US-41, SMA STP50-US-41, SMA STP62-US-41,
SMA EDMM-US-10

Overview:

This Frankensolar Tech Tip shows the options how SMA inverters can be commissioned for remote system monitoring with the SMA SunnyPortal and SMA SunnyPortal-EnnexOS.

Option 1: Systems with up to 4 inverters

Every SMA inverter has dual Ethernet ports and a WIFI interface. The inverter can be connected directly to a router or WIFI access point with an internet connection. In this scenario, no other SMA components are required and each inverter establishes its own connection to the SMA SunnyPortal. This direct connection is limited to 4 inverters per SunnyPortal site.

Option 2: Systems with more than 4 inverters

Systems with more than 4 SMA inverters are indirectly connected to the internet and to the SMA SunnyPortal/SunnyPortal-EnnexOS. This allows for a more efficient onsite data-compilation with only one data-gateway communicating with the SMA SunnyPortal-EnnexOS.

In this scenario, all inverters are communicating over Ethernet or WIFI with the SMA Datamanager M (SMA EDMM-US-10). The Datamanager M processes all system data and acts as the sole communication gateway for all inverters to send data to the SunnyPortal-EnnexOS.

Up to 50 devices (e.g. SMA inverters or SMA inverters and smart-meters/environmental-sensors/etc. can be connected to one SMA Datamanager M.