

Subject: Connect Entelar Energy Inverters to Univers via Huawei 4G Dongle and SmartLogger

Revision History
Version 1.0 – July 2024 - Initial release

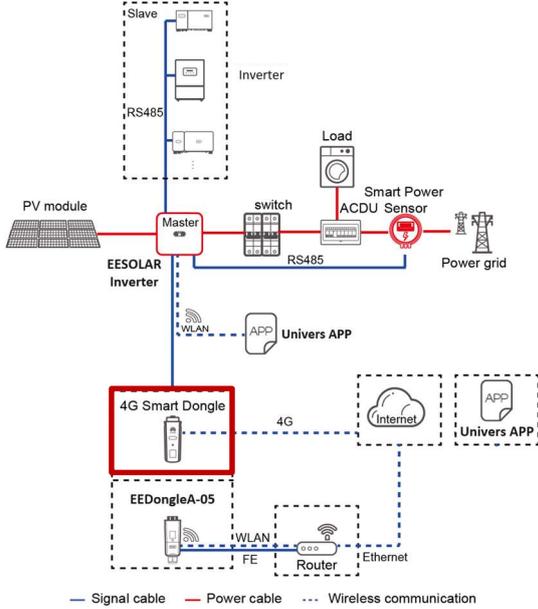
Applicable products and models
EESOLAR-5/6KTL-L1
EESOLAR-6/10KTL-M1
EESOLAR-29.9/40/50KTL-M3
Huawei 4G Smart Dongle
Huawei SmartLogger3000A01AU

Description

To fulfill continuous market demand to connect Entelar inverters to Univers management platform through 4G network in the New Zealand market, Entelar Energy is working with Huawei to allow using Huawei 4G dongle/SmartLogger to connect Entelar Energy inverters to Univers.

Specific configuration and commissioning steps are required. This application note describes the typical scenario for mixed integration use of Huawei and Entelar devices.

1. Entelar Inverter with Huawei 4G Dongle

<p>Application Scenario</p>	<p>Using Huawei 4G Dongle to connect Entelar Energy inverter to Univers.</p>
<p>Solution Description</p>	<p>Installers can use Huawei 4G Dongle (SDongleB-06 AU) to connect Entelar Energy inverters (EESOLAR-5/6KTL-L1, EESOLAR-6/10KTL-M1, EESOLAR-29.9/40/50KTL-M3) to Univers management platform.</p>
<p>Solution Diagram</p>	 <p>The diagram illustrates the system architecture. A PV module is connected to an EESOLAR Inverter. The inverter has a Master unit and a Slave unit, connected via RS485. The Master unit is connected to a switch, which then connects to a Load and a Smart Power AC/DC Sensor. The sensor is connected to the Power grid. The Master unit is also connected to a 4G Smart Dongle (highlighted in a red box). The 4G Smart Dongle is connected to the Internet via 4G. The Internet is connected to the Univers APP. The 4G Smart Dongle is also connected to a Router via WLAN. The Router is connected to the Internet via Ethernet. The Router is also connected to the Univers APP via WLAN. A legend at the bottom indicates: Signal cable (blue line), Power cable (red line), and Wireless communication (dashed blue line).</p>

<p>Solution Configuration</p>	<p>Communication Device:</p> <ul style="list-style-type: none"> • Huawei 4G Smart Dongle <p>Supported Inverter:</p> <ul style="list-style-type: none"> • EESOLAR-5/6KTL-L1 • EESOLAR-6/10KTL-M1 • EESOLAR-29.9/40/50KTL-M3 <p>Supported Scenarios:</p> <ul style="list-style-type: none"> • Huawei 4G Smart Dongle + EESTORE-5-6KTL-L1 • Huawei 4G Smart Dongle + EESTORE-6-10KTL-M1 • Huawei 4G Smart Dongle + EESTORE-29.9/40/50KTL-M3 <p>Remote Monitoring:</p> <ul style="list-style-type: none"> • Huawei 4G Smart Dongle communicates to Entelar Management Platform via 4G Network <p>Smart Power Sensor:</p> <ul style="list-style-type: none"> • DDSU666-H/DTSU666-H 250A /DTSU666-HW 	<p>Commissioning App:</p> <ul style="list-style-type: none"> • Entelar HiSolar <p>Management System:</p> <ul style="list-style-type: none"> • Entelar - Unvers Management platform <p>Commissioning Requirement:</p> <ul style="list-style-type: none"> • Domain: entelarenergy-emsportal.com • Port: 27251 with 'TLS' disabled <p>For more details, please reference both Huawei and Entelar User Manuals or contact local support.</p>
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2. Entelar Energy Inverter with Huawei SmartLogger

<p>Application Solution</p>	<p>Using Huawei SmartLogger to connect Entelar Energy inverter to Unvers.</p>
<p>Solution Description</p>	<p>Installers can use Huawei SmartLogger (SmartLogger30000A01AU) to connect Entelar inverters (EESOLAR-5/6KTL-L1, EESOLAR-6/10KTL-M1, EESOLAR-29.9/40/50KTL-M3) to Unvers management platform.</p>
<p>Solution Diagram</p>	<p>The diagram illustrates the system architecture. PV modules are connected to Inverter 1 and Inverter n. These inverters are connected to a combiner box, which is then connected to a smart power sensor and the power grid. The SmartLogger device is connected to the inverters via RS485 (Signal cable). The SmartLogger is also connected to a 4G Antenna and a Router. The Router is connected to the Internet, which is accessed by the Unvers App and Management system. A Ripple Control Device is also connected to the SmartLogger via RS485. The SmartLogger can be accessed via SmartLogger WebUI or FusionSolar APP. A legend at the bottom identifies the connection types: Signal cable (blue), Power cable (red), Wireless communication (dashed), and Ethernet cable (green).</p>

<p>Solution Configuration</p>	<p>Communication Device:</p> <ul style="list-style-type: none"> • SmartLogger3000A01AU <p>Supported Inverter:</p> <ul style="list-style-type: none"> • EESOLAR-5/6KTL-L1 • EESOLAR-6/10KTL-M1 • EESOLAR-29.9/40/50KTL-M3 <p>Supported Scenarios:</p> <ul style="list-style-type: none"> • SmartLogger3000A + EESTORE-5/6KTL-L1 • SmartLogger3000A + EESTORE-6/10KTL-M1 • SmartLogger3000A + EESTORE-29.9/40/50KTL-M3 <p>Remote Monitoring:</p> <ul style="list-style-type: none"> • Huawei SmartLogger communicates to Entelar Management Platform via 4G Network or Ethernet <p>Smart Power Sensor:</p> <ul style="list-style-type: none"> • DDSU666-H/DTSU666-H 250A /DTSU666-HW... 	<p>Commissioning App:</p> <ul style="list-style-type: none"> • Huawei FusionSolar App to commission the SmartLogger <p>Management System:</p> <ul style="list-style-type: none"> • Entelar Energy - Univers Management platform <p>Commissioning Requirement:</p> <ul style="list-style-type: none"> • Domain: entelarenergy-emsportal.com • Port: 27251 with 'TLS' disabled. <p>For more details, please reference both Huawei and Entelar User Manuals or contact local support.</p>
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Disclaimer

1. Inverter and accessory configuration and integration compatibility is subject to change. Entelar Energy reserves the right to alter future compatibility of devices and systems due to product and solution changes.

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