

Killing phrases

“Range” specification for tender for *EcoStruxure Panel Server Advanced*

Specification for tender doc name	Section	Killing phrases	Value for the Customer
<i>PAS800_General_Spec_June_2021</i>	2	The Energy Server shall comply to following safety standards : <ul style="list-style-type: none"> • IEC: IEC 61010-1 • North America: UL61010-1 	Customer safety
	2	The Energy Server shall comply with the following radio/wireless communication standards: <ul style="list-style-type: none"> • North America: FCC Class B • IEC: EN 55032, CISPR 11, EN301-489 • Wi-Fi: IEEE 802.11 a/b/g/n • Wireless: IEE 802.15.4 	Helps ensuring that the Energy Server do not harm surrounding devcies behavior
	2	The Energy Server shall comply to following energy server standards as a data-logger: <ul style="list-style-type: none"> • IEC: IEC 62974-1 	Helps ensuring correct data & measurement capture and reporting
	4	The Energy Server shall be able to operate using wide range power supplies: <ul style="list-style-type: none"> • 110 to 277 V AC / DC (+/-10%) (PAS800 only) • PoE-PD CLASS 0, IEEE802.3af/at (PAS800P only) • 24 V DC (+/-10%) (PAS800L only) 	Easy to order, one device includes the correct power supply for all countries.
	5	The Energy Server shall have two IEC62053-31 Class A-compatible digital inputs (PAS 800L only)	Simplifies installation fo dry-contact or wages capture.
	5	The Energy Server shall have two Ethernet ports, which can be used either as a switch or separated ports (one IP address for each). <p style="margin-left: 40px;">Ethernet Port 1 shall be configurable as:</p> <ul style="list-style-type: none"> ▪ DHCP client (switch mode) ▪ Static IP address (switch or separated mode) <p style="margin-left: 40px;">Ethernet Port 2 shall be configurable as:</p>	Simplifies installation. Reduces the need for an Ethernet switch in the switchboard. Separates the electrical network from IT network (as recommended for modern buildings). DHCP: Time saving for network administration. Static IP: Allows the customer to choose the best option for their system.

		<ul style="list-style-type: none"> ▪ DHCP client (switch mode) ▪ DHCP server (separated mode) ▪ Static IP address (switch or separated mode) 	
	5	The Energy Server shall support Wi-Fi as an access point without any WiFi infrastructure for setup.	Access point mode allows configuration from laptop (or Tablet) outside the switchboard electrical room.
	5	The Energy Server shall support Wi-Fi as infrastructure mode to connect through the customer's Wi-Fi network to the monitoring system.	Allows for the Energy Server to connect to customer's wireless network. Reduces the cost and effort to run new Ethernet wire.
	5	The Energy Server shall comply to IEE 802.15.4 to support various wireless devices	Simplify and save time for panel wiring. One same energy server supports connection to wireless devices and Modbus devices
	5	Wireless communication shall be encrypted on AES128 bit CCM and using star topology only (no mesh).	Secure communication. Star topology would guarantee that every device can communicate directly with the Energy Server .
	5	Wireless devices shall communicate wirelessly with Ethernet Energy Server (no communication cables) with a limited Isotropic Radiated Power up to 0dBm (or 1mW).	No undesired effect of radio emission on other equipments in the panel.
	5	The Energy Server shall communicate with up to 100 wireless devices	Optimized foot-print.
	6	The Energy Server shall provide an automatic grounding connection point through the DIN rail.	Easy to install protection against electrical shocks and enhanced EMC compatibility
	7	The Energy Server settings shall be accessible through a configuration software allowing back-up and restore of the settings.	Allow configuration backup & restore, configuration preparation offline.
	7	The Energy Server settings shall be accessible through onboard web pages	Easy configuration when a tool is not available
	7	The Energy Server shall be equipped by DPWS (Device Profile for Web Services) technology (available on Windows operating systems starting with Vista) with the two following web-services Discovery and Identification	No specific software tool or installation to configure the DPWS. Finds connected energy servers without the need to know IP address. Helps to provide installation time less than 1 hour.
	8	The Energy Server shall be designed through a secured development lifecycle in accordance to IEC 62443-4-1.	
	8	The Energy Server shall embed a unique device genuineness certificate that helps proving that it is a genuine hardware from the Energy Server manufacturer. The certificate shall be stored in an EAL6+ certified security controller.	Helps ensuring the user that is not using a tampered device that may put at risk the operation

	8	The Energy Server shall only accept signed firmware from the Energy Server provider	Energy Server has cyber security enhancements to allow only the intended firmware to run.
	8	Users shall have the ability to set their own passwords which follows Cybersecurity best practices. A password containing letters, numbers and special characters shall be made mandatory for the gateway in operation phase	Helps ensuring that only authorized personal will access to system
	8	The Energy Server access to login page shall operate using HTTPS protocol. The user password shall be stored encrypted.	Helps ensuring that only authorized personal will access to system
	8	The Energy Server shall provide the option to disable wireless connections, ports or protocols not used	Helps ensuring that only authorized personal and systems will access to Energy Server
	9	The End User shall be able to use the Energy Server to access downstream Modbus electrical devices, digital inputs (PAS800L only) and wireless devices values in "real time" through EcoStruxure Power Monitoring Expert, EcoStruxure Power Operations, EcoStruxure Building Operation or other software platform.	Allows the end user to connect a software platform like EcoStruxure Power Monitoring Expert, EcoStruxure Power Operations, EcoStruxure Building Operation or other software platform to read and log data on devices connected through serial Modbus and/or digital/analog inputs and/or wireless devices. Reduces cost and footprint by providing more features through a single piece of equipment (Energy Server) The Energy Server acts as a passthrough Modbus Energy Server .
	9	The Energy Server shall have embedded web pages for real time information monitoring and display active alarms for connected devices by usage	Allows the user to see in real-time the data for connected devices. This allows the user to further investigate a single device.
	9	The Energy Server shall have embedded web pages for measurements historical trending analysis over up to 3 years	Energy and operation efficiency through actual behaviour follow-up.
	9	The Energy Server shall allow customizable thresholds for alarms for electrical measurements and environmental measurements.	Allows the user to access alarm information from the gateway itself, without the need to have another software for analysis
	9	The Energy Server shall be able to send alarms over email to the users.	Allows the user to access alarm information from the gateway itself, without the need to have another software for analysis
	9	The Energy Server shall have embedded synthesis Modbus registers for connected wireless devices table to optimize communication from the upstream system to the wireless devices	Easy communication with upstream system
	9	The Energy Server shall have a 32GB memory for measurement logging up to 3 years	Energy and Operation follow-up and efficiency.

	10	<p>The Energy Server shall have a visible indicator on its front-face to show:</p> <ul style="list-style-type: none"> ▪ Power is on and the Energy Server is in nominal operating mode. ▪ Minor malfunction requiring the Energy Server or the system to be serviced ▪ Major malfunction requiring the Energy Server to be replaced. 	Provides immediate visible information to end user to help provide troubleshooting information.
	10	<p>The Energy Server shall detect and report the following:</p> <ul style="list-style-type: none"> ▪ Device communication loss ▪ CPU overuse ▪ Memory overuse 	Provides the end user or partner with the tools needed to help troubleshoot issues with communication loss, or system performance.
	10	The Energy Server shall log internal diagnostics events for troubleshooting support	Allow the Customer Support Center to better and faster support the end-user.
	10	The Energy Server shall have embedded web-pages for diagnostic and troubleshooting	Provides the end user or partner with the tools needed to help troubleshoot issues with communication loss, performance or system performance.