

Killing phrases

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

Specification for tender doc name	Section	Killing phrases	Value for the Customer
<i>PAS600_General_Spec_June_2021</i>	2	The gateway shall comply to following safety standards : <ul style="list-style-type: none"> • IEC: IEC 61010-1 • North America: UL61010-1 	Customer safety
	2	The gateway 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 gateway do not harm surrounding devcies behavior
	2	The gateway 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 gateway shall be able to operate using wide range power supplies: <ul style="list-style-type: none"> • 110 to 240 V AC/DC (+/-10%) (PAS600T only) • 110 to 277 V AC / DC (+/-10%) (PAS600 only) • 24 V DC (+/-10%) (PAS600L only) 	Easy to order, one device includes the correct power supply for all countries.
	5	The gateway shall have two IEC62053-31 Class A-compatible digital inputs (PAS 600L only)	Simplifies installation fo dry-contact or wages capture.
	5	The gateway 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> <ul style="list-style-type: none"> ▪ DHCP client (switch mode) 	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 server (separated mode) ▪ Static IP address (switch or separated mode) 	
	5	The Gateway 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 Gateway shall support Wi-Fi as infrastructure mode to connect through the customer's Wi-Fi network to the monitoring system	Allows for the gateway to connect to customer's wireless network. Reduces the cost and effort to run new Ethernet wire.
	5	The gateway shall comply to IEE 802.15.4 to support various wireless devices	Simplify and save time for panel wiring. One same gateway 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 gateway.
	5	Wireless devices shall communicate wirelessly with Ethernet gateway (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 gateway shall communicate with up to 100 wireless devices	Optimized foot-print.
	6	The gateway shall provide an automatic grounding connection point through the DIN rail.	Easy to install protection against electrical shocks and enhanced EMC compatibility
	7	The gateway 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 gateway settings shall be accessible through onboard web pages	Easy configuration when a tool is not available
	7	The Gateway 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 gateway shall be designed through a secured development lifecycle in accordance to IEC 62443-4-1.	
	8	The gateway shall only accept signed firmware from the gateway provider	Gateway has cyber security enhancements to allow only the intended firmware to run.
	8	The gateway shall embed a unique device genuineness certificate that helps proving that it is a genuine hardware from the gateway 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	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 gateway 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 gateway shall provide the option to disable wireless connections, ports or protocols not used	Helps ensuring that only authorized personal and systems will access to gateway
	9	The End User shall be able to use the gateway to access downstream Modbus electrical devices, digital inputs (PAS600L 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 (gateway) The gateway acts as a passthrough Modbus gateway.
	9	The gateway 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 gateway 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 gateway shall be able to send alerts and alarms over email to the Users.	Allows the user to get alerts from the gateway itself, without the need to have another software
	9	The gateway 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 gateway shall support multiple concurrent connections and up to 64 concurrent TCP sessions opened	Allows to connect several supervision systems at the same time to the gateway (PME, EBO, 3rd party, webpage clients...)
	10	The gateway shall have a visible indicator on its front-face to show: <ul style="list-style-type: none"> ▪ Power is on and the gateway is in nominal operating mode. ▪ Minor malfunction requiring the gateway or the system to be serviced ▪ Major malfunction requiring the gateway to be replaced. 	Provides immediate visible information to end user to help provide troubleshooting information.

	10	The gateway shall detect and report the following: <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 gateway shall log internal diagnostics events for troubleshooting support	Allow the Customer Support Center to better and faster support the end-user.
	10	The gateway 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.