Device Controller

The Blyx Device Controller is a versatile unit that enables remote access to data and control of connected devices across your facility. It acts as a bridge between hardware in the field and the Blyx platform, translating real-world activity into actionable, digital insights.

Ethernet

The controller features an Ethernet port that connects to the building switch. This single Cat6 cable provides both **network connectivity and power** via PoE, keeping installation simple and reliable.

Reader Port (RS485 Communication)

This port connects to devices using RS485—a robust communication protocol for sending data between hardware. In access control setups, an RFID reader plugs into this port to send credential data to the controller.

The controller can then either pass that data to the Blyx platform or act on it locally to trigger pre-programmed actions.

Control Port (Relay Output + Feedback)

This port functions like a relay, toggling connected devices between on/off states. For example, *in* access control systems, this is where an electric striker is connected to manage lock/unlock functionality. In the case of managed strikers or other smart hardware, this port can also receive feedback—such as door open/closed signals.

Broad Compatibility

The Blyx Device Controller is designed to work with a wide range of systems beyond access control. Using the same connection principles—data input via RS485 and output via relay—the controller can integrate with devices like boom gates, hot water systems, flow meters, lighting, CCTV systems, and even payment triggers. This flexibility makes it a powerful tool for extending smart control across almost any part of a facility.

www.Blyx.com.au

Hot Water Systems

If a hot water system uses RS485 communication with a protocol like Modbus RTU, you can typically access a range of useful data. This includes real-time status indicators such as current water temperature, heating element activity, operating mode, and any fault or error codes. You may also receive energy-related data like power consumption, usage history, and cycle efficiency. Configuration settings—such as temperature setpoints, safety limits, and schedules—are often accessible, along with diagnostic information like runtime hours, service history, internal component temperatures, and other maintenance-related flags. This data can be used for monitoring, automation, and preventive maintenance, depending on the system's capabilities and the data points exposed.

Water Flow Meters

When a water flow meter communicates over RS485 using a protocol like Modbus RTU, you can typically access both real-time and historical flow data. This often includes instantaneous flow rate, total cumulative volume, and sometimes bidirectional flow (inflow vs outflow). Many meters also provide pressure readings, temperature (if integrated), and velocity. Configuration parameters such as measurement units, scaling factors, and alarm thresholds may be available, along with diagnostic information like signal strength, fault codes, and status flags. This data is valuable for monitoring usage, detecting anomalies, and integrating water usage into broader building or site management systems.

Blyx can integrate directly with these systems, making it easier to track and respond to water usage in real time. This supports case studies where products are installed to reduce water wastage or optimise usage patterns. The same approach applies to tanks and sewage systems—Blyx helps facilities stay on top of levels that need attention before they become problems. After all, no one wants to run out of water—or for shit creek to become a real thing.