



EMI-One PRO

No.: 925-303-00

For embedded software version later than 1.0.0
v. 1.0



Introduction

The **EMI-One PRO** controller is a compact and robust device designed to provide **secure, centralized control** over both **access management** and **environmental monitoring** within server cabinets, containments & more.

Engineered for management of single server cabinets which ensures system scalability, reliability on the highest level and integration with a management system such as the **EMI Connect management software**.

With support for remote access, real-time alerts, and centralized logging, this device helps to maintain compliance, operational efficiency, and asset integrity across critical data center infrastructure.

Description

- Control, configuration and reading of the device's settings by a transparent interface through a web browser (built-in web-server),
- 2 Ethernet interfaces (2x1Gbit with separate, independent MACs) for connection redundancy,
- Dual DC power sockets and additionally PoE+ support for connecting controller up to 3 independent sources for power redundancy,
- 4x separate 12V output channels for steering terminal equipment e.g. sliding doors, ceiling light or ventilation system,
- 6x independent digital inputs enabling the usage of two-state sensor such as fire detectors, gas detectors, flood detectors, motion detectors, power failure etc. of which 2 inputs are dedicated for access control (door contacts),

- 2x potential-free relay outputs of NO/NC type that allow connecting devices that require higher power,
- Possibility to connect **up to 10 digital sensors** of the following types: temperature, combo temperature & humidity and air pressure which allow simultaneous measurement in different places inside a server cabinet. Each sensor can have its unique address and label assigned via web-interface of the controller,
- Support of EMI-POWER SR-Link metered PDUs in scope of data aggregation,
- Extended, fully customizable alarm section that can be triggered depending on the input states & values measured from devices connected to the controller: electronic handles, binary inputs, temperature, humidity, pressure values or electrical parameters from PDUs,
- Ability of automatic control for configured outputs depending on the input state or measured values on the basis of a dynamic rules system,
- 2x dedicated sockets for connecting electronic handles from the apra EMI-Lock family, and from other, external manufacturers, also with built-in RFID readers
- Access control functionality by means of support for:
 - RFID transponder readers (both external and built inside electronic handles),
 - external LCD touch panels (with authentication via PIN code)
 - remote access & control
 - multi-level security configuration for user accounts (different permission levels)
- The EMI-One PRO controller is compliant with the NIS2 directive for access control systems in scope of:
 - Encrypted data exchange on whole communication line (card/token-reader-controller-server),
 - Support of data encryption mechanisms such as AES-128,
 - Support of safe data exchange via the OSDPV2 protocol,
 - 2-factor authentication (2FA) (via PIN code and RFID tag readout),
 - 2-stage authorisation (via readout of different 2 different RFID cards one after another),
- 2x USB sockets that allow integration with camera system (which captures images every time authorisation is attempted),
- Dedicated microSD card slot enabling event log backup on an external memory device,
- All settings, measurement data & event log saved in the controller's built-in non-volatile memory (up to 100k events),
- REST API OAS 3.0 (OpenAPI Specification) for easy integration with 3rd party services
- Support of encrypted e-mail notifications,
- Support of the SNMP v2c and v3 protocol with Trap notifications,
- Support of SMS and e-mail notifications via GSM (additional module required),
- Built-in acoustic indicator and LED diodes informing about the device's status,
- Dedicated EMI-Connect software that enables management of multiple devices and allowing long-term data saving and parameter analysis.

Technical data

Power	230V AC / 12V DC module (12V/30W PSU included)
Power over Ethernet	PoE+, up to 25W, 802.3at compliant
Power consumption	typ. 150 mA, max. 2A
Electrical connectors	2x DC Jack, 2x RJ12, 5x RJ45, 1x TBW-4, 8x TBW-3, 4x TBW-2
Supported protocols	IPv4, IPv6, DHCP, DNS, HTTP, HTTPS (TLS v1.3), REST API, SNMP v2c/v3, NTP, SMTP, SMTPS (Secure SMTP over TLS), SSH, Modbus TCP over TLS, LDAP, SYSLOG, SNTP, MQTT, OSDPv2
Ethernet	2x 10/100/1000 Base-TX (with separate, dual MACs)
USB	2x USB 2.0
Event log capacity	Up to 100 000 entries
External memory	microSD flash card support up to 32GB
Relay outputs	Yes, 2x mono-stable relays rated 30V DC at nominal load of 5A
Working temperature	From 0°C to 60°C
Acceptable humidity range	From 10% to 90% (non-condensing)
Dimensions	311x70x31 mm
Weight	300g net
Casing	Plastic
Casing colour	Black
IP rating	IP20
Accessories	Power supply, user manual and warranty card
Certifications	CE, RoHS

