

# AEOS Blue door controller

## AP7803

The AP7803 is an extremely powerful and cost-effective door controller. The ample computing power in combination with intelligent software components, make it possible to utilise all functionalities of the AEOS platform with a single module. Its versatility makes this door controller suitable for use in both new systems and as a replacement for existing access control systems.

- Versatile and future-proof
- Designed with internal logic
- Compatible with PoE (+) and 12-27 Volt DC power supplies



### Future-proof

The functionality of the AP7803 is software-based, which ensures maximum flexibility. It can even control security holding areas, revolving gates and lifts without any additional equipment. Through the software, the AP7803 can be instantly adapted to emerging needs, without the need to replace any hardware.

### Intelligence at the edge

The powerful processor makes decisions internally and communicates with other door controllers in the network. This allows each door controller to remain fully operational, even if the connection to the server is lost. This architecture provides an extremely robust and scalable system.

### PoE and bus connection

The AP7803 not only makes decisions internally, but can also be powered via Ethernet (PoE), so it is ideal for use as a networked door controller. The AP7803 can also be used in a traditional setup, where substations are controlled through the 485-bus, making it possible to use both variants in a single system.

## Technical specifications

Dimensions	Housing: 230 x 165 x 65 mm (H x W x D) Module: 122 x 120 x 35 mm (H x W x D)
Weight	Housing incl. module: approx. 700 g, module: approx. 200 g
Housing	PC ABS
Temperature range	Housing: operation: 0 °C to 45 °C, storage: -30 °C to 65 °C Module: operation: 0 °C to 55 °C, storage: -30 °C to 65 °C
Relative humidity	20% to 90% (non-condensing)
Controller	800 MHz CPU, 256 MB SDRAM, 2 GB Flash memory
Ethernet connection	10/100 Mbps, RJ45
485bus connection	RS485 based (non-isolated), jumper selectable end of line, support for up to 32 units
Power over Ethernet	PoE+: IEEE 802.3at Readers: 500 mA @ 12 VDC (shared by both readers) Locks: 600 mA @ 12 VDC (shared by both locks) PoE: IEEE 802.3af, max. 500 mA @ 12 VDC (readers only)
External power supply	12-27 VDC (min. 250 mA, max. 1.5 A @ 12-27 VDC) Readers: 500 mA @ Vin (shared by both readers) Locks: 600 mA @ Vin (shared by both locks)
Readers	2 x RS485 or 2 x Wiegand
Inputs	2 x 3 secured inputs (Door monitor, Manual unlock, Emergency unlock) 2 digital inputs (AC OK, Battery low)
Outputs	2 x 1 relay, dry contacts (NC, COM, NO), max. 30 VDC, max. 2 A 2 x 3 open collector outputs (Green LED, Red LED, Beeper), max. 20 mA each
Tamper detection	1 optical tamper sensor (AP7803) 1 digital input (for connecting external tamper switch)
Status LEDs	1 Status LED, 1 Power LED, 2 Reader LEDs
Ethernet wiring	UTP CAT 5, max. 100 m
485bus wiring	1 x 2 x 0.22 mm <sup>2</sup> shielded (100-120 Ω), max. 1200 m
External power supply wiring	2 x 0.5 mm <sup>2</sup> shielded, max. 5 m
Reader wiring	RS485 excl. power: 1 x 2 x 0.22 mm <sup>2</sup> shielded, max. 1000 m (depending on reader) RS485 incl. power: 2 x 2 x 0.22 mm <sup>2</sup> shielded, max. 150 m (depending on reader) Wiegand: n x 0.22 mm <sup>2</sup> shielded, max. 150 m (depending on reader)
Sensor wiring	n x 0.22 mm <sup>2</sup> , max. 100 m

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