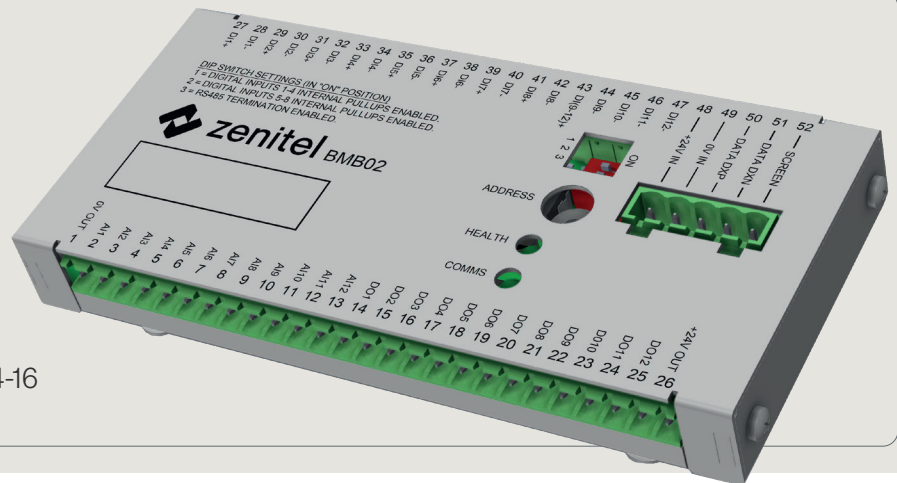- ✓ 12 digital outputs (open collector)
- ✓ 12 digital inputs
- ✓ 12 analog inputs
- ✓ Low profile DIN-rail mountable casing
- ✓ LED indication
- ✓ Compatible with Zenitel's range of DSP audio routers
- ✓ An Integrated part of the Zenitel EN 54-16 Certified PAVA system

BMB02

I/O **Expansion Unit**

The BMB02 is a compact DIN-rail mountable enclosure, that functions as an input and output contact (I/O)expander specifically designed to enhance the capabilities of Zenitel's PAVA system. This device acts as an extension, augmenting the features of the PAVA System. BMB02 is a direct replacement for the BMB01.

The BMB02 connects to a host Audio Router using DC power and a RS485 serial interface, supporting multi-drop communication that can accommodate up to nine units connected in parallel.

Typically, the BMB02 is installed inside the PAVA cabinet alongside the host audio router. However, utilizing standard CAT5/6 cable, the expander can be placed externally up to 500 meters away from the host device.

Each BMB unit supports: 12 optionally monitored analogue inputs, 12 opto-isolated digital inputs and 12 monitored digital outputs with open collector configuration.
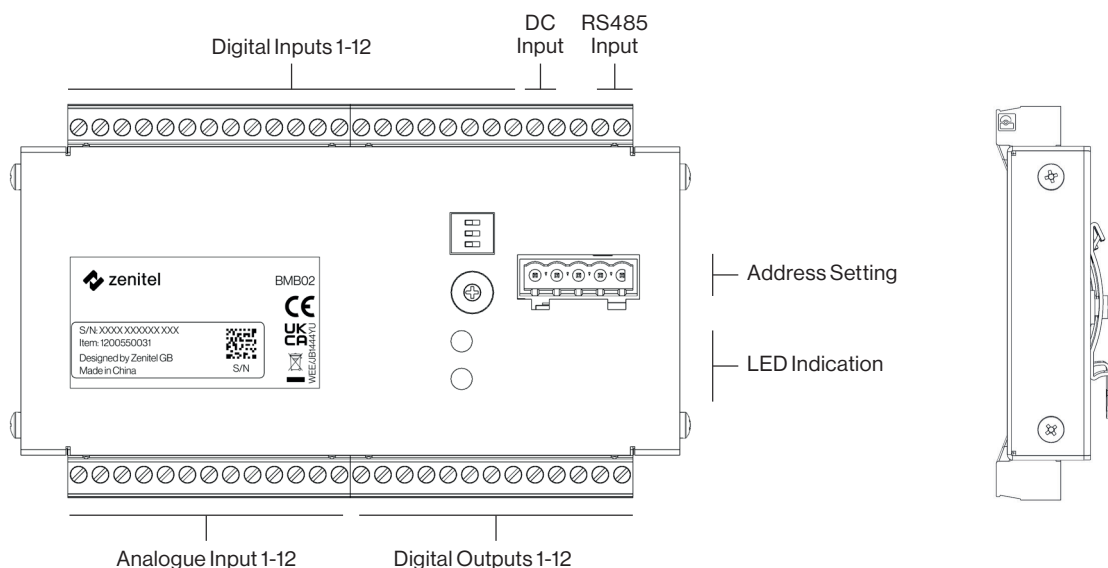
The GPIO offers a range of functions including:
- Program Selection
- Volume Control
- Third-party Fault Monitoring
- Routing Control
- External Fault Reporting
- Zone Busy Status

EN 54 Certified
Adhering to industry standards, the BMB02 is EN 54-16 certified as part of the Zenitel PAVA system. It provides comprehensive monitoring capabilities for processors, power supplies, and contacts. Any detected faults are reported back to the host Audio Router and categorised in compliance with the requirements EN 54-16.

MECHANICAL

SPECIFICATIONS

Input Supply

Supply Voltage	18-60 V DC
Operating Current (Worst Case)	35 mA at 24 V DC

General Purpose Input/Outputs

Digital Outputs	12 Active Low, Open Collector
Maximum Rated Current	350 mA
Maximum Rated Voltage	60 V
Analogue Inputs	12 Non Isolated Pulled up to 5 V through 4.7kΩ
Digital Inputs	12 Opto Isolated 12-60 V

Interface

Connection to the Audio Router	EIA RS485 9600 baud
Multi-drop Data	Up to 9 Units

LED Indicators

Power	Green
Comms	Green

Environmental

Operating	-5°C to +55°C
Storage	-5°C to +55°C
Humidity Range	0% to 93% non-condensing
Ingress Protection	IP20

Mechanical

Finish	Metal (Zintec) / Silver
Mounting	DIN Rail Mount
Dimensions (H x W x D)	92mm x 159mm x 44mm
Weight	0.37kg
Connectors	Provided

Heat

Operating (Worst Case)	1 W / 3.4 BTU

Reliability

MTBF MIL-HDBK-217F (Notice 2)	> 180,000 hours

Software, Tools and Management

Configuration Tools	IP based SCT
Software Package	≥V1

Approvals & Standards Compliance

Fire	EN 54-16
Rail	EN 50121-4
Electromagnetic Compatibility Directive (Emissions & Immunity)	EN 61000 Series EN50130-4
Low Voltage Directive (Safety)	EN / UL / IEC 62368-1
Conformity	CE / CPR / UKCA
Environmental	RoHS / REACH

Part Code

BMB02	DIN Rail Mount I/O Expansion Unit

Compatible Hardware

VIPEDIA-12-NET / VIPEDIA-12-PRO	DSP Audio Controller / Router
INTEGRA Range Available in 3, 5, 7 and 10 Channels	Up to 500 W per Channel 2000 W Public Address Voice Alarm System Batteries not included
BMB01	DIN Rail Mount I/O Expansion Unit