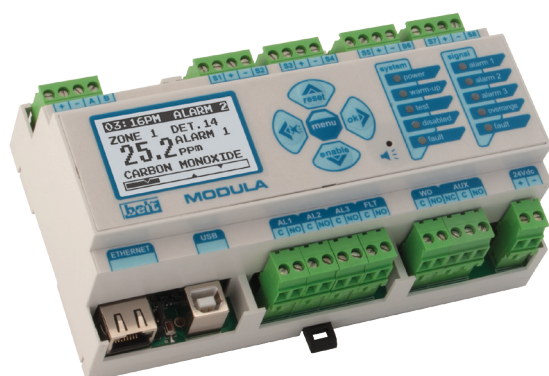


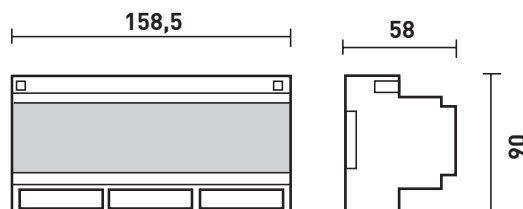
# MODULA 8

up to 8 gas detectors

## GAS DETECTION CONTROL UNIT



# MODULA<sup>8</sup>



MODULA 8 is a specifically designed detection center in order to be used in all applications within the monitoring and control of areas to be protected from gas leaks flammable or from the presence of toxic gases.

The control unit is equipped with 8 analog inputs  $4 \div 20$  mA on board which it is possible to connect standard gas detectors with proportional in output current. The control panel is also equipped with 1 zone relay output for each detector (4 total), 1 general alarm output, and 1 auxiliary output freely programmable.

The zone outputs can be associated with any of the thresholds alarm (Alarm 1, Alarm 2, Alarm 3, Full scale +), or at single detector failure. The alarm output can also be associated with any threshold of system alarm. The auxiliary output can be associated with several conditions.

The large backlit graphic display allows you to view in a way clear the gas concentration measured by the detectors and the thresholds of alarm of each detector. The control unit programming takes place with the use of 5 buttons navigation and an intuitive user menu.

Some LEDs are also available on the front for viewing immediate condition of the control panel and detectors. The control unit is made in a container for DIN rail mounting, a 9 modules.

The mains power supply takes place by means of an external power supply 230/24Vcc (not included).

## Features

- ▲ Power supply: 24 Vdc with short circuit protection and overload
- ▲ Up to 8 detectors  $4 \div 20$  Ma
- ▲ Rail DIN 9 modules installation
- ▲ Inputs protected against short circuit and overload
- ▲ 3 programmable alarm thresholds for each detector
- ▲ TWA alarm thresholds for calculating exposure levels TWA and STEL
- ▲ 4 zone relays, 1 alarm relay
- ▲ 1 fully programmable auxiliary relay
- ▲ Simple and intuitive configuration thanks to the graphic display
- ▲ Default programs for the most common applications
- ▲ 2 access levels password protected
- ▲ Non volatile event memory (999 events organized by type)
- ▲ Comply with the following Standards:  
CEI 216-5/1, EN50545-1, EN45544-2, EN60079-29-1, EN50271, SIL1

## AVAILABLE VERSIONS

### Control unit

**B30-MODULA8** Control unit up to 8 gas detectors

### Alimentatori

**B98-ALD2420BAT** Alimentatore per barra DIN 230V/24V 2A con carica batterie  
**B98-ALD425MW** Alimentatore per barra DIN 230V/24V 2,5A  
**B98-BAT12V6A** Batteria 7Ah 12Vcc

### Accessories and spares

**B98-BCT12** DIN box 12 modules IP40

### Compatible detectors

**WPD/CAL** 4+20 mA combustible gas detector IP55 plastic enclosure  
**IRON/CAL** 4+20 mA combustible gas detector IP65 metallic enclosure  
**IRON/CA3S** 4+20 mA CO gas detector IP65 metallic enclosure  
**IRON/CO2** 4+20 mA CO2 gas detector IP65 metallic enclosure  
**WPD/CAL** 4+20 mA CO gas detector con modulo sostituibile CA3  
**ATX/CAL** 4+20 mA combustible gas detector certified ATEX (EEx d)  
**ATX/ECL** 4+20 mA toxic gas detector certified ATEX (EEx d)  
**WPDS/CA3S** CO gas detector con modulo sostituibile CA3S  
**WPDS/CAX** Combustible gas detector con modulo sostituibile CAX  
**WPDS/CO2** CO2 combustible gas detector con modulo sostituibile CO2



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# MODULA 8

## GAS DETECTION CONTROL UNIT

## Technical specifications

| POWER                |                                                                                                                                                        |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power supply:        | 24 Vdc with short-circuit and overload protection                                                                                                      |
| Current consumption: | 46 mA stand-by (backlit low)<br>92 mA stand-by (backlit high)<br>160 mA max                                                                            |
| ENVIRONMENTAL        |                                                                                                                                                        |
| Working temperature: | -5 / + 40 °C                                                                                                                                           |
| Relative humidity:   | 5 ÷ 95% non-condensing                                                                                                                                 |
| Enclosure rating:    | IP20                                                                                                                                                   |
| MECHANICAL           |                                                                                                                                                        |
| Dimensions:          | 158,5 x 90 x 58 mm                                                                                                                                     |
| Weight:              | 330 gr                                                                                                                                                 |
| Colour:              | Light grey (RAL 7035)                                                                                                                                  |
| Housing material:    | PC/ABS UL94-V0 autoestinguente                                                                                                                         |
| Mounting:            | DIN rail – EN50022 (9 modules)                                                                                                                         |
| Terminal blocks:     | Plug-in terminal blocks                                                                                                                                |
| ALARM THRESHOLDS     | 3 alarm thresholds for each detector<br>Time weighted alarm thresholds for the calculation of TWA and STEL exposure levels (EN50545-1 compliant)       |
| MEASURING RANGES     | Combustible gases: 0-100% L.E.L.<br>Toxic gases: 0-9999 p.p.m.<br>Oxygen: 0-25% O <sub>2</sub><br>CO <sub>2</sub> : 0-100% vol                         |
| IMPUTS               | 8 (4 ÷ 20 mA) with short-circuit and overload protection                                                                                               |
| RELAY OUTPUTS        |                                                                                                                                                        |
| Alarm relay:         | 3 (alarm 1, 2, 3) SPST 3A@250Vca                                                                                                                       |
| Fault relay:         | SPST 3A@250Vca                                                                                                                                         |
| Watchdog relay:      | SPST 3A@250Vca                                                                                                                                         |
| Auxiliary relay:     | SPDT 10A@250Vca (programmable)                                                                                                                         |
| Activation logic:    | normally energized or de-energized                                                                                                                     |
| Activation mode:     | reflex, with memory, temporized                                                                                                                        |
| AUDIBLE INDICATIONS  | Local alarm/fault buzzer (silenceable)                                                                                                                 |
| LED INDICATORS       | 5 system status leds<br>(power, warm-up, test, disabled, fault)<br>5 detectors status leds<br>(alarm 1, alarm 2, alarm 3, over-range, fault)           |
| INTERFACE            | Graphic LCD 128x64 pixel<br>5 push buttons (for system configuration and use)<br>Multilingual menu<br>(Italian, English, Russian, Spanish, Portuguese) |
| ACCESS LEVELS        | 2 password protected access levels                                                                                                                     |
| CLOCK                | RTC Clock with backup battery                                                                                                                          |
| EVENT LOG            | 999 events organised by event type                                                                                                                     |
| APPROVALS            | CEI 216-5/1, EN50545-1, EN45544-2,<br>EN60079-29-1, EN50271, SIL1                                                                                      |



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This data sheet replaces previous ones.

The manufacturer can change without prior notice product specifications and details.

Descriptions and illustrations are shown only in order to aid the customer.

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