

## CO-016 CARBONMONOXIDE CONTROL PANEL



CO-016 Addressable Carbon Monoxide Detection and Control Panel is the control unit of the carbon monoxide system and works as a Scada system with the CO540 Carbon Monoxide detector.

The CO-016 Carbon Monoxide Control Panel is designed to process the measurement data from the CO 540 detectors and to perform three-level control according to the scenario created. It can provide three different controls according to the gas levels detected in the detectors. The threshold values for these gas levels are set during installation (can be changed later). When the first 2 threshold values are exceeded, the fans are activated and if it is possible to evacuate the gas in the environment, the system returns to normal position without going into the alarm state. If the 3rd level threshold is exceeded, the control panel goes into the alarm state and stays in this position until reset. In this way, it provides the opportunity to prevent the gas in the environment before it reaches critical levels.

The CO-016 Carbon Monoxide Control Panel communicates with the Redban Addressable Advanced Protocol (RAAP). In this way, it instantly collects measurement data from devices. In addition, the calibration of the devices can be set by the panel. It can operate 80 devices, 48 of which are detectors, in one cycle. It can be increased up to 4 loops and a total of 320 devices can be connected to these loops. There are 2 supervised siren outputs, 3 open collector outputs, alarm and fault relay outputs and 2 24V supply outputs as protected and unprotected on the motherboard. Devices to be included in the system from outside can be supplied from these outputs, considering the current and voltage values.

### Features

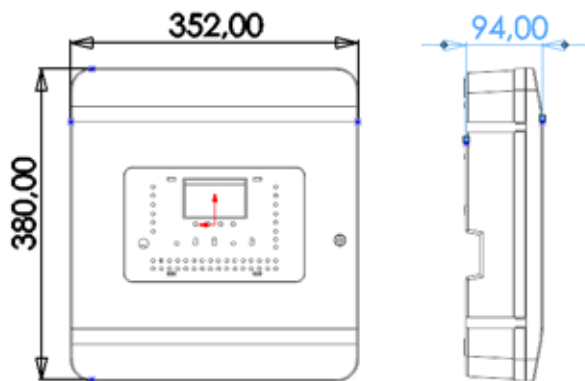
- IP30 robust and aesthetic PC/ABS case
- Microprocessor based design
- Production with SMT technology
- 16 Programmable Zones
- All threshold levels can be programmed separately for each zone
- Intelligent interactive communication with Redban RAAP protocol
- Define 3 threshold levels for each zone
- Average or Peak value selection
- Continuous supervision of all detectors and modules
- Gas levels can be continuously monitored
- 2 level indicator LEDs for each zone



# ADDRESSABLE CARBONMONOXIDE DETECTION & CONTROL SYSTEM

## TECHNICAL SPECIFICATIONS

<b>OPERATING VOLTAGE</b>	<b>CO-016</b> 180-240 Vac
<b>POWER CONSUMPTION</b>	100 Watt
<b>NUMBER OF LOOP</b>	1
<b>NUMBER OF DEVICES IN THE LOOP</b>	80
<b>MAXIMUM NUMBER OF DEVICES OF THE PANEL</b>	320
<b>LOOP CURRENT</b>	230 mA
<b>LOOP LOAD</b>	120 Ω
<b>NETWORK OPERATING</b>	No
<b>BATTERY TYPE</b>	Sealed Lead Acid Battery
<b>BATTERY CAPACITY</b>	2 X12V 7Ah
<b>BATTERY SHORT-CIRCUIT PROTECTION</b>	Yes
<b>SIREN SUPERVISED OUTPUTS</b>	1
<b>OUTPUT TYPE</b>	Relay N.Open Contact
<b>CONTACT STRENGTH</b>	2A @ 30V DC
<b>FUSE</b>	400 mA, Auto Reset
<b>OUTPUT VOLTAGE</b>	27,6 Vdc
<b>END OF LINE RESISTANCE</b>	6.8 K Ω 1/4 Watt
<b>GENERAL PURPOSE OUTPUTS</b>	3
<b>OUTPUT TYPE</b>	Open Collector
<b>OUTPUT CURRENT</b>	50 mA
<b>ALARM RELAY OUTPUT</b>	
<b>OUTPUT TYPE</b>	N.Open (NO), N.Closed (NC)
<b>CONTACT STRENGTH</b>	2 A @ 30 v DC
<b>ERROR RELAY OUTPUT</b>	
<b>OUTPUT TYPE</b>	N.Open (NO), N.Closed (NC)
<b>CONTACT STRENGTH</b>	2 A @ 30 v DC
<b>24V DC PROTECTED VOLTAGE OUTPUT</b>	Yes
<b>OUTPUT CURRENT</b>	400 mA, Resettable Fused
<b>24V DC NOT PROTECTED VOLTAGE OUTPUT</b>	Yes
<b>OUTPUT CURRENT</b>	2A (Unfused)
<b>SERIAL DATA INTERFACE (USB - RS485)</b>	1-2
<b>BAUDRATE</b>	9600 BPS
<b>DATA BITS</b>	8
<b>PARITY BIT</b>	None
<b>STOP BIT</b>	1
<b>FLOW CONTROL</b>	None
<b>DATA RETENTION</b>	10 Year
<b>GK120 POWER SUPPLY (Parameters)</b>	
<b>Battery Resistance</b>	400 mΩ
<b>EN54-4 Test Parameters Imin, Imaxa, Imaxb</b>	27mA, 1.5A, 1.8A



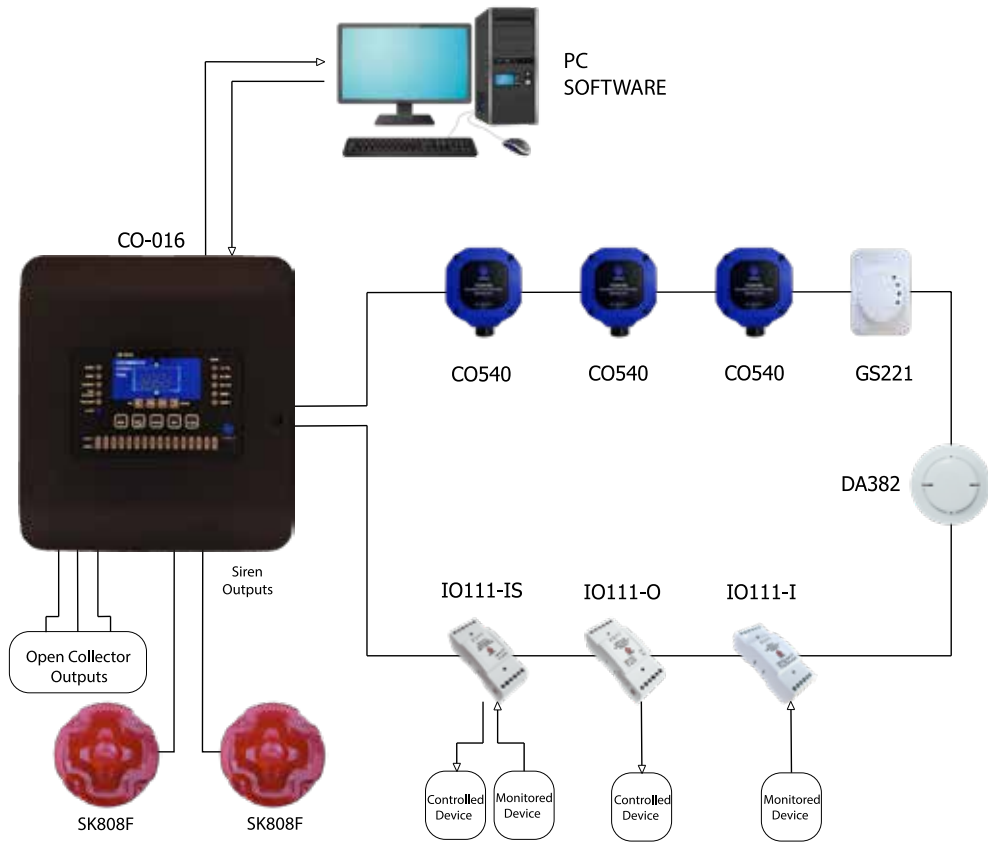
## ENVIRONMENTAL SPECIFICATIONS

<b>OPERATING TEMPERATURE</b>	-10 °C ≈ +55°C
<b>HUMIDITY</b>	%0 ≈ %95 Relative Humidity
<b>ENVIRONMENTAL CATEGORY</b>	IP21

## PHYSICAL SPECIFICATIONS

<b>CASE MATERIAL</b>	PC/ABS Case
<b>DIMENSIONS (H x W x D)</b>	38 x 35,2 x 9,4 cm
<b>WEIGHT</b>	2,6 Kg (without battery)

## SCHEMATIC DIAGRAM



## SYSTEM WORKING

Carbonmonoxide system is an addressable system. In this way desired devices can be assigned to a zone with virtual zoning. In addition to the carbonmonoxide detector, natural gas detector and heat detector can also be used in the addressable carbon monoxide system. In addition to carbon monoxide detectors, such detectors are needed in car parks and tunnels in case of a leak in LPG-powered vehicles or to detect temperature increases in batteries in electric vehicles, which have become very common today. Additionally, it is possible to include any desired device with relay into the system with monitoring modules.