

## 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.

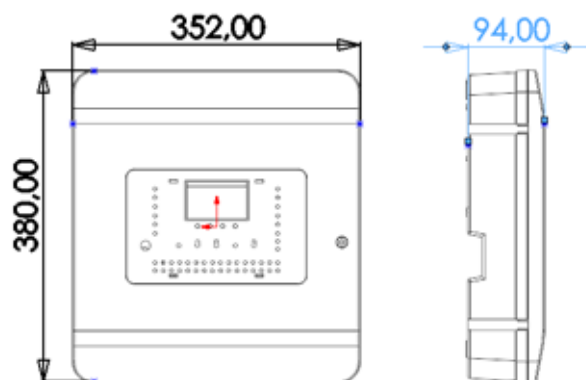
### Features

- 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



## TECHNICAL SPECIFICATIONS

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



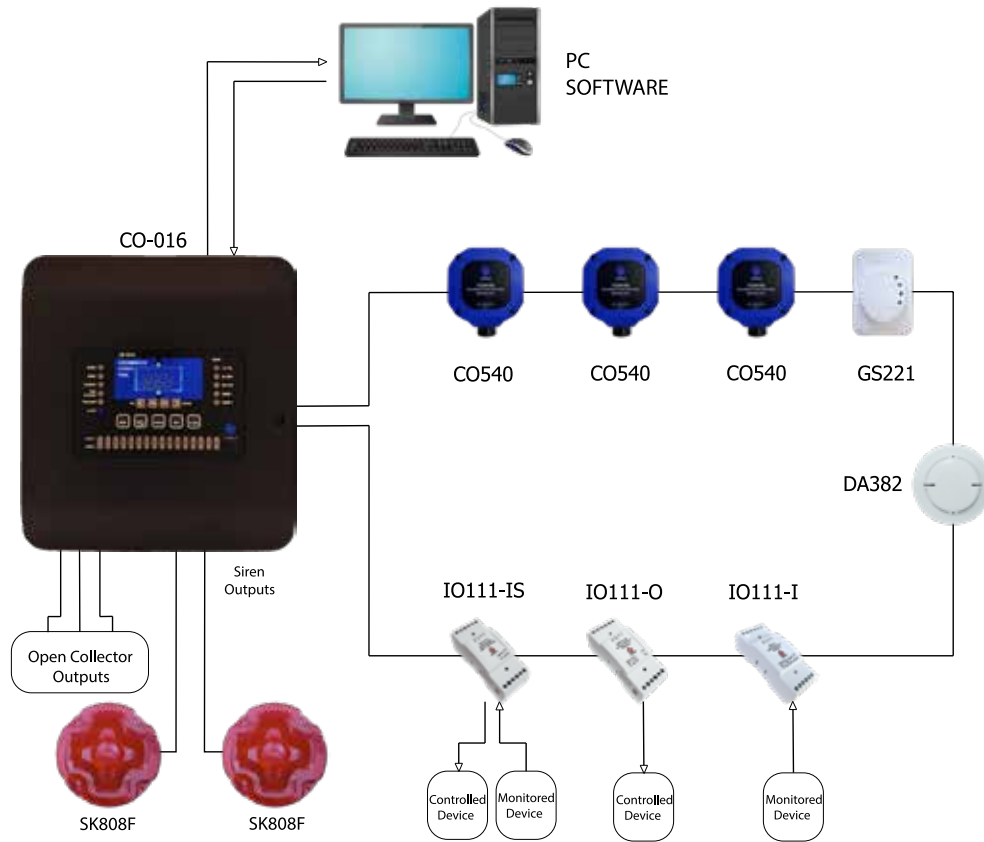
## ENVIRONMENTAL SPECIFICATIONS

OPERATING TEMPERATURE	-10 °C $\approx$ +55°C
HUMIDITY	%0 $\approx$ %95 Relative Humidity
ENVIRONMENTAL CATEGORY	IP21

## PHYSICAL SPECIFICATIONS

CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	38 x 35,2 x 9,4 cm
WEIGHT	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.