## **MULTISCAN++ PK**

The MULTISCAN++PK is a gas detection control unit designed to meet the widest range of flexibility required by the market. It is compliant with the EN 50545-1 standard, which defines the requirements for the detection of CO and NO2 in car parks and tunnels.

The control panel is based on a powerful microprocessor which provides a wide range of self-diagnostic procedures to detect and locate possible faults.

It can manage up to 16, 32, 64, 128 or 256 gas detectors (according to the five different versions). The detectors can be either of addressable type, directly connected on the buses, or 4-20 mA analogical types connected via 8-input STG/ IN8-PK remote modules. The system architecture also provides up to 516 freely programmable Open Collector outputs provided by STG/OUT16S modules, always connected on the RS485 bus. Also 8 on-board machine relays are included ( 6 with Multiscan++ 16).

The gas panel can be placed in 19" 6U rack, or in a plastic box complete with 27.6 Vdc 4 A power supply.



Electrical data		Functionalities	
Power supply Absorption	Box version: power supply with Vout=27.6 Vdc / lout=4A, Vin=110 Vac or 220 Vac selectable by a manual switch. Possibility to place two 12V 7Ah batteries. Rack version: connect to an external 24Vdc power supply 200 mA	Programming	Configuration with Sensitron software
		Operating levels	3, set via password
		Car park application	Alarm activation is programmable as function of the time-weighted average of gas concentration
Available current	3 A for field connections MTS256/128/64: available two auxiliary power supply of 1.1 A each one MTS32/16: available an auxiliary power supply of 1.1A	Set / Unset detectors	Possibility of unset one or more channels for field maintenance
		Test	Possibility of channels test field
		Supervision	Efficient Modbus protocol for system supervision
Input modules	STG/IN4-OUT4-PK: 4 inputs 4-20mA STG/IN8-PK: 8 inputs 4-20 mA	Event log	The event log can be visualised from the gas panel or by the software
Output modules	STG/IN4-OUT4-PK: 4 relays outputs STG/OUT16S: 16 Open Collector outputs, convertible into relays with the STG/8REL module	Date and time	Internal clock with backup to keep the date and time even after a shutdown
Inputs	8 inputs 4-20 mA on board, additional inputs available via the remote modules. Sensitron gas detectors can be also connected directly on RS485 bus. The total inputs number depends on the gas panel model: Multiscan++ 256: up to 256 inputs Multiscan++ 128: up to 128 inputs Multiscan++ 64: up to 64 inputs Multiscan++ 32: up to 32 inputs Multiscan++ 16: up to 16 inputs	Visual indications	LCD display 18 status LEDs
		Acoustic indications	Buzzer 60 dB at 1m
		Front panel buttons	Numbers from 1 to 9, ENT ESC and four directional buttons
		Environmental conditions	
		Storage temperature	-20 / +60°C
Outputs	Multiscan++ 256/128/64/32: 8 relays on board Mutliscan++ 16: 6 relays on board Additional outputs available via the remote modules, the total outputs number depends on the gas panel model: Multiscan++ 256: up to 516 outputs Multiscan++ 128: up to 256 outputs Multiscan++ 64: up to 128 outputs Multiscan++ 32: up to 64 outputs Multiscan++ 16: up to 32 outputs	Operating temperature	0 / +50°C
		Operating humidity	15 / 85% RH non condensing
		Box	
		Material	ABS or aluminium rack
		Dimensions	Plastic box 470x426x148 mm r rack 19" 6 units
		Weight	Rack version: 4.5 kg Box version: 6.6 kg (without batteries)
Relays contact ratings	10A a 250 Vac main board, 16A 250 Vac IN4-OUT4 and 8REL modules	Cable entry	Box version: 4 preformed holes
RS485 ports	Multiscan++ 256/128: 4 RS485 ports Multiscan++ 64: 2 RS485 ports expandable to 4 Multiscan++ 32: 2 RS485 ports Multiscan++ 16: 1 RS485 ports expandable to 2	Wall fixing	Box version: supplied with 4 mounting brackets
		Compliance	
		EMC	EN 61000-6-3:2007 + A1:2011; EN 50270:2015
Serial ports	1 x RS232 for programming, supervision and firmware updating 1 x printing parallel port (only Multiscan++ 256/128/64)	SIL	EN 50271:2018
		Car park standard	EN 50545-1:2011+A1:2016
Communication protocol	Galileo or Modbus for field communication Modbus for the supervision		



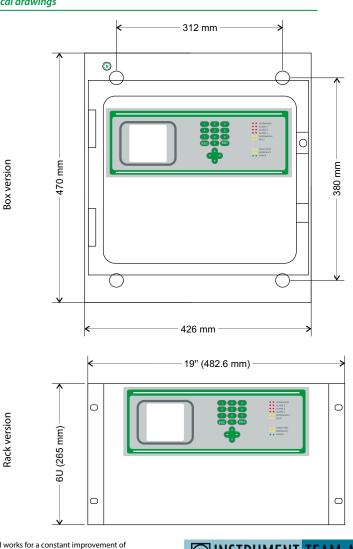
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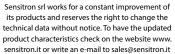
STMTS/PK-16B

Product codes	
STMTS/PK-256B	256 Analog 4-20 mA gas detectors connected through re- mote 8-input modules or addressable gas detectors daisy chained to the RS485 control panel's loops and 8 x 4-20 mA inputs on-board the panel. 8 relay outputs and up to 512 O/C or relay outputs via remote modules.
STMTS/PK-256	Rack version of STMTS/PK-256B
STMTS/PK-128B	128 Analog 4-20 mA gas detectors connected through re- mote 8-input modules or addressable gas detectors daisy chained to the RS485 control panel's loops and 8 x 4-20 mA inputs on-board the panel. 8 relay outputs and up to 256 O/C or relay outputs via remote modules.
STMTS/PK-128	Rack version of STMTS/PK-128B
STMTS/PK-64B	64 Analog 4-20 mA gas detectors connected through re- mote 8-input modules or addressable gas detectors daisy chained to the RS485 control panel's loops and 8 x 4-20 mA inputs on-board the panel. 8 relay outputs and up to 128 O/C or relay outputs via remote modules.
STMTS/PK-64	Rack version of STMTS/PK-64B
STMTS/PK-32B	32 Analog 4-20 mA gas detectors connected through re- mote 8-input modules or addressable gas detectors daisy chained to the RS485 control panel's loops and 8 x 4-20 mA inputs on-board the panel. 8 relay outputs and up to 64 O/C or relay outputs via remote modules.
STMTS/PK-32	Rack version of STMTS/PK-32B

## 16 Analog 4-20 mA gas detectors connected through remote 8-input modules or a dressable gas detectors daisy chained to the RS485 control panel's loop and 8 x 4-20 mÅ inputs on-board the panel. 6 relay outputs and up to 32 O/C or relay outputs via remote modules. STMTS/PK-16 Rack version of STMTS/PK-16B STG/MTSPK-CONF Windows PC software for MULTISCAN++PK control panel programming. STG/IN4-OUT4-PK Remote module with 4 inputs 4-20mA and 4 output relays STG/IN8-PK High safety 8-input remote module STG/OUT16S High safety 16-output remote module STG/8REL Plug and play relay board to be connected to STG/OUT16 to provide 8 relay outputs Additional Serial board to implement serial lines in MUL-STG/SER++ TISCAN++PK STG/TCPIP-C TCP/IP interface for LAN connection VMB/267V40 Metal Cabinet with enclosed a 27 Vdc 4A Power Supply STG/BOX IP55 Plastic box to house STG/IN8-S or STG/OUT16-S card STG/32-85 RS232/RS485 Interface for PC connection on RS485 line

## Mechanical drawings







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