

SUNSTAR商斯达实业集团是集研发、生产、工程、销售、代理经销、技术咨询、信息服务等为一体的高科技企业，是专业高科技电子产品生产厂家，是具有 10 多年历史的专业电子元器件供应商，是中国最早和最大的仓储式连锁规模经营大型综合电子零部件代理分销商之一，是一家专业代理和分销世界各大品牌IC芯片和电子元器件的连锁经营综合性国际公司。在香港、北京、深圳、上海、西安、成都等全国主要电子市场设有直属分公司和产品展示展销窗口门市部专卖店及代理分销商，已在全国范围内建成强大统一的供货和代理分销网络。我们专业代理经销、开发生产电子元器件、集成电路、传感器、微波光电元器件、工控机/DOC/DOM电子盘、专用电路、单片机开发、MCU/DSP/ARM/FPGA软件硬件、二极管、三极管、模块等，是您可靠的一站式现货配套供应商、方案提供商、部件功能模块开发配套商。**专业以现代信息产业（计算机、通讯及传感器）三大支柱之一的传感器为主营业务，专业经营各类传感器的代理、销售生产、网络信息、科技图书资料及配套产品设计、工程开发。我们的专业网站——中国传感器科技信息网（全球传感器数据库）www.SENSOR-IC.COM 服务于全球高科技生产商及贸易商，为企业科技产品开发提供技术交流平台。欢迎各厂商互通有无、交换信息、交换链接、发布寻求代理信息。欢迎国外高科技传感器、变送器、执行器、自动控制产品厂商介绍产品到中国，共同开拓市场。**本网站是关于各种传感器-变送器-仪器仪表及工业自动化大型专业网站，深入到工业控制、系统工程计 测量、自动化、安防报警、消费电子等众多领域，把最新的传感器-变送器-仪器仪表买卖信息，最新技术供求，最新采购商，行业动态，发展方向，最新的技术应用和市场资讯及时的传递给广大科技开发、科学研究、产品设计人员。本网站已成功为石油、化工、电力、医药、生物、航空、航天、国防、能源、冶金、电子、工业、农业、交通、汽车、矿山、煤炭、纺织、信息、通信、IT、安防、环保、印刷、科研、气象、仪器仪表等领域从事科学研究、产品设计、开发、生产制造的科技人员、管理人员、和采购人员提供满意服务。**我公司专业开发生产、代理、经销、销售各种传感器、变送器、敏感元器件、开关、执行器、仪器仪表、自动化控制系统：专门从事设计、生产、销售各种传感器、变送器、各种测控仪表、热工仪表、现场控制器、计算机控制系统、数据采集系统、各类环境监控系统、专用控制系统应用软件以及嵌入式系统开发及应用等工作。**如热敏电阻、压敏电阻、温度传感器、湿度变送器、湿度传感器、湿度变送器、气体传感器、压力传感器、压力变送器、称重传感器、物（液）位传感器、物（液）位变送器、流量传感器、流量变送器、电流（压）传感器、溶氧传感器、霍尔传感器、图像传感器、超声波传感器、位移传感器、速度传感器、加速度传感器、扭矩传感器、红外传感器、紫外传感器、火焰传感器、激光传感器、振动传感器、轴角传感器、光电传感器、接近传感器、干簧管传感器、继电器传感器、微型电泵、磁敏（阻）传感器、压力开关、接近开关、光电开关、色标传感器、光纤传感器、齿轮测速传感器、时间继电器、计数器、计米器、温控仪、固态继电器、调压模块、电磁铁、电压表、电流表等特殊传感器。同时承接传感器应用电路、产品设计和自动化工程项目。

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Enviromental monitoring unit

PCM 6-02

The microprocessor Control boards **PCM602**, planned and built by **SENSITRON S.r.l.**, offers the greatest safety and reliability for industrial applications.

The Control boards are able to support 2 independent analog inputs:

connected to gas detectors, series **SMART-2**, they analyse, in real time, the presence of flammable compounds, the concentration of

which is expressed as percentage of the Lower Explosion Level (%LEL), or toxic compounds, the concentration of which is expressed in parts per million (PPM), or the deficiency or excess of oxygen.

The technical features and the innovative planning put the **Control Boards PCM602** between the most advanced equipments for the monitoring of industrial environment.

Their modularity, full expandibility and possibility to interface proportional 4-20 mA output detectors, together with the availability of: relays outputs for local command and remote monitoring through output RS-485, make the Control Boards suitable for several applications.

The modular execution allows to concentrate in a singol 19" rack up to 10 **PCM602** Control boards, each provided with an own independent supply group.

Usually the units are supplied with 24V DC or 220/100V AC 50/60Hz; it is possible, in addition, the double (redundant) supply.

The **Control Boards PCM602**, are able to run the current signal from detectors, as well as to supply the detectors with a supply unit, that is voltage monitored and provided with a current limiting device to eliminate sparks in case of short-circuit.

The **Control Boards PCM602** are provided with an



alphanumeric Back lit LCD display 8 characters on 2 rows. The Display shows the measure, that come from the connected detectors, continuously (real time).

In case of alarm, the reached threshold level is shown on display; each threshold or function is displayed by double redundant logic-LED.

The functions:

Acknowledge, Reset, Programming are activated by 3 push

bottoms.

In the measure range, 3 alarm thresholds, **Caution, Warning, Alarm**, run with sequences: **ISA-A Warning**, and **ISA-M Alarm**; in addition, a **Fault** signal is available. The 3 thresholds and the Fault signal are provided with independent relays outputs. System Faults are shown on the display and with the LED "Fault" and run by the Fault relay; in addition, an independent Watch-dog with relay output is present.

In order to give a further safety warranty, a serial interactive output RS485 is provided, which is able to communicate with **MULTISCAN-IDI** panels, via PC or PLC. The microprocessor circuitry is provided with: Watch-Dog logic, auto-diagnosis and supply control and relative signalling outputs. The **Control Board PCM602**, if connected to non-provided detectors, is with an algorithm proprietary software provided, to maintain the zero-parameter of the sensor, apart from possible drift due to thermic or physical variations of the same sensor; following functions are also available: **digital filter** employed to correct temporary events, which should be ground of system instability or reading errors and consequent false alarms;

hysteresis cycle applied to the digital outputs, associated to the alarm threshold, to avoid possible switchings around threshold points.

SPECIFICATIONS

Housing	Rack 19" - 3U 3HE x 8TE Module
Standard power supply	23 – 30 Vcc nominal 24Vdc
Optional power supply	11 – 14 Vcc nominal 12Vdc Or 110/220Vac + - 15% 50/60Hz Other voltages on request
Power consumption DC:	only the board: Max 4W
Power consumption AC:	only the board: Max 6VA
Power supply output	with current protection
Inputs	2 analog
Signal measured	4–20 mA on 200 Ohm max.
Line resistance	10 Ohm max.
Alarm relay outputs	3 relay with SPDT contacts
Fault relay output	1 relay NO contact
Watch-Dog control o/p	1 normally energized relay NC contact
Relay contact current	1A 24 Vdc 60VA
Relay approvation	UL, CSA
Electrical outputs	4 open collector outputs
Serial ports	1 RS-485 interactive
Microprocessor	8 bit 8 Mhz
Non volatile memory	1 Kbyte
Display	Back lit LCD 8c. on 2 rows
Front panel indications	3 for Alarm thresholds, 1 for Fault, 1 for powered unit and 1 for RS485 com. All the indications are by double LED for redundant logic
Alarm thresholds	3 (caution, warning, alarm)
Connection	by DIN-41612 connector
Accuracy	+/- 1 digit
Operating temperature	from –10 to +55°C
Storage temperature	from –20 to +70°C
Relative umidity	90% non condensing
Warm-up time	60"



CONNETTABLE TO THE FOLLOWING "SENSITRON" CONTROL PANELS:

CODE	DESCRIPTION
ST.G/MTIDB	GALILEO IDI CONTROL UNIT, up to 120 SMART IDI explosive and toxic gas detectors connected on 4 RS485 buses. 4 outputs upgradable to 128. Housed in a metal cabinet with 12 Vdc-3.5 Amp. enclosed power supply. CENTRONIC output for parallel printer. 1 x RS232 computer port. Event log.
ST.G/MTIDR	As above but in 19" 3 U rack. 12 Vdc power supply is required.

COMPATIBLE WITH THE FOLLOWING SENSITRON DETECTORS

SMART 2 CATALYTIC SENSITRON SERIE	Microprocessor Detectors, catalytic sensor, with three thresholds open-collectors alarm output, and 4 - 20 mA proportional output. Power supply 11-24 VDC.
SMART 2 "ELECTROCHEM. CELL" SENSITRON SERIE	Microprocessor Detectors, ELECTROCHEMICAL CELL sensor, with three thresholds open-collectors alarm output, and 4 - 20 mA proportional output. Power supply 11-24 VDC.

Due to **Sensitron's** commitment to research, design and product improvement specifications are subject to change without notice.



For more informations, please contact:

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