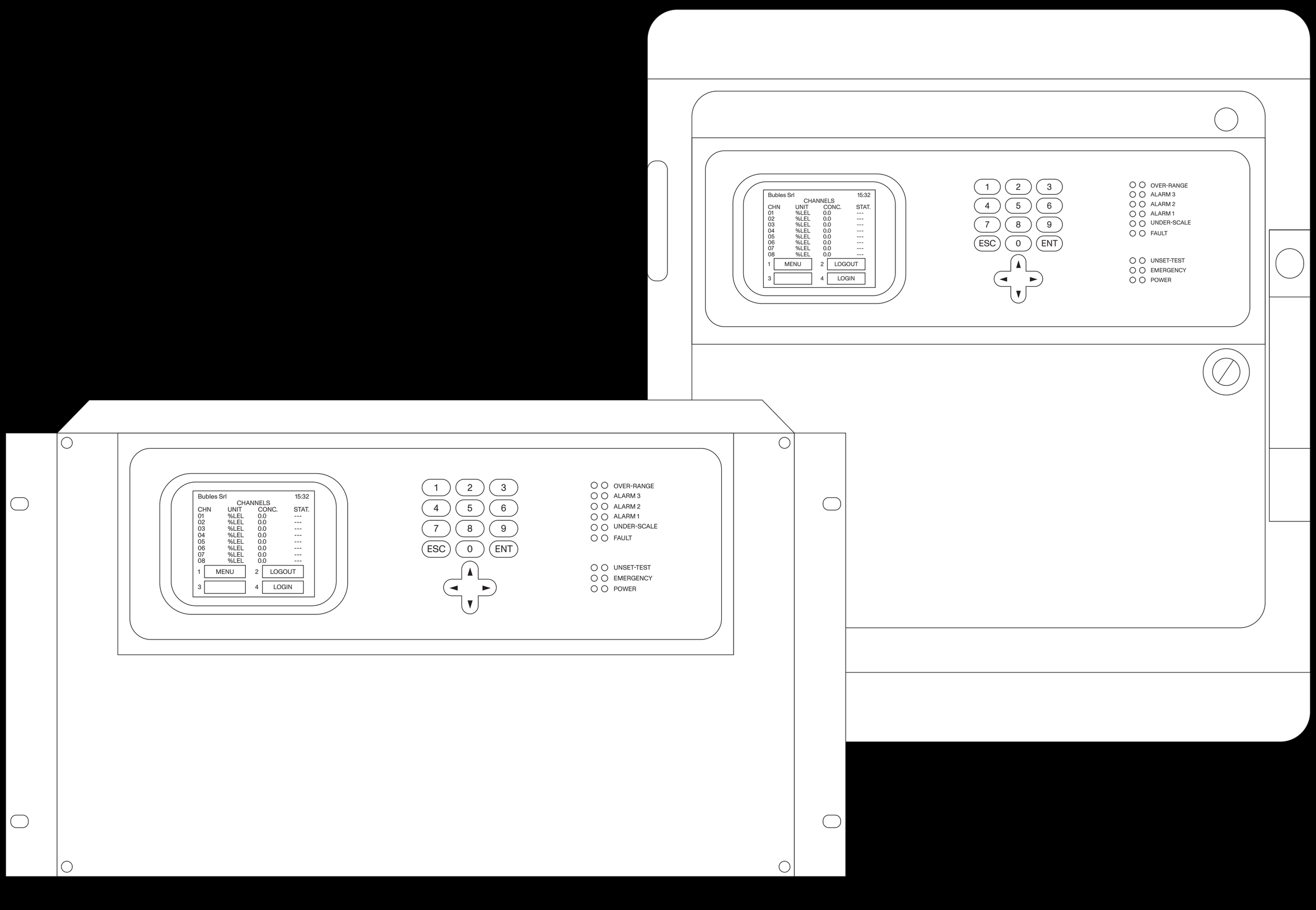
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MULTISCAN++ S2



Datasheet

DS5046 Rev. 4 23/01/2024
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The MULTISCAN++S2 is a gas detection control unit designed to meet the widest range of flexibility required by the market. The gas panel is certified SIL2 and ATEX following the standards EN 60079-0 and EN 60079-29-1. 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 32, 64, 128 or 256 gas detectors (according to the four 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-S2 remote modules. The system architecture also provides up to 516 freely programmable Open Collector outputs provided by STG/OUT16-S2 modules, always connected on the RS485 bus. Also 8 relays onboard the panel are included.
The gas panel can be placed in 19'' 6U rack, or in a plastic box complete with 27.6 Vdc 4 A power supply.

MULTISCAN++S2 is SIL2 and it is ATEX marked as follows:

CE 0722 Ex II (2)G [Ex Gb] II



Functionalities

Programming	Configuration with Sensitron software
Operating levels	3, set via password
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
Event log	The event log can be visualised from the gas panel or by the software
Date and time	Internal clock with backup to keep the date and time even after a shutdown
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

Electrical data

Power supply	Box version: power supply with V_{out}=27.6 Vdc / I_{out}=4A, V_{in}=220 Vac Possibility to place two 12V 7Ah batteries. Rack version: connect to an external 24Vdc power supply
Absorption	200 mA
Available current	3 A for field connections MTS256/128/64: available two auxiliary power supply of 1.1 A each one MTS32: available an auxiliary power supply of 1.1A
Input modules	STG/IN4-OUT4-S2: 4 inputs 4-20mA STG/IN8-S2: 8 inputs 4-20 mA
Output modules	STG/IN4-OUT4-S2: 4 relays outputs STG/OUT16-S2: 16 Open Collector outputs, convertible into relays with the STG/8REL module
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
Outputs	8 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
Relays contact ratings	10A a 250 Vac main board, 16A 250 Vac IN4-OUT4 and 8REL modules
RS485 ports	Multiscan++ 256/128/64: 2 RS485 closed loops (4 RS485 ports) Multiscan++ 32: 1 RS485 closed loop (2 RS485 ports)
Serial ports	1 x RS232 for programming, supervision and firmware updating 1 x printing parallel port
Communication protocol	Galileo or Modbus for field communication Modbus for the supervision

Environmental conditions	
Storage temperature	-20 / +60°C
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)
Cable entry	Box version: 4 preformed holes
Wall fixing	Box version: supplied with 4 mounting brackets

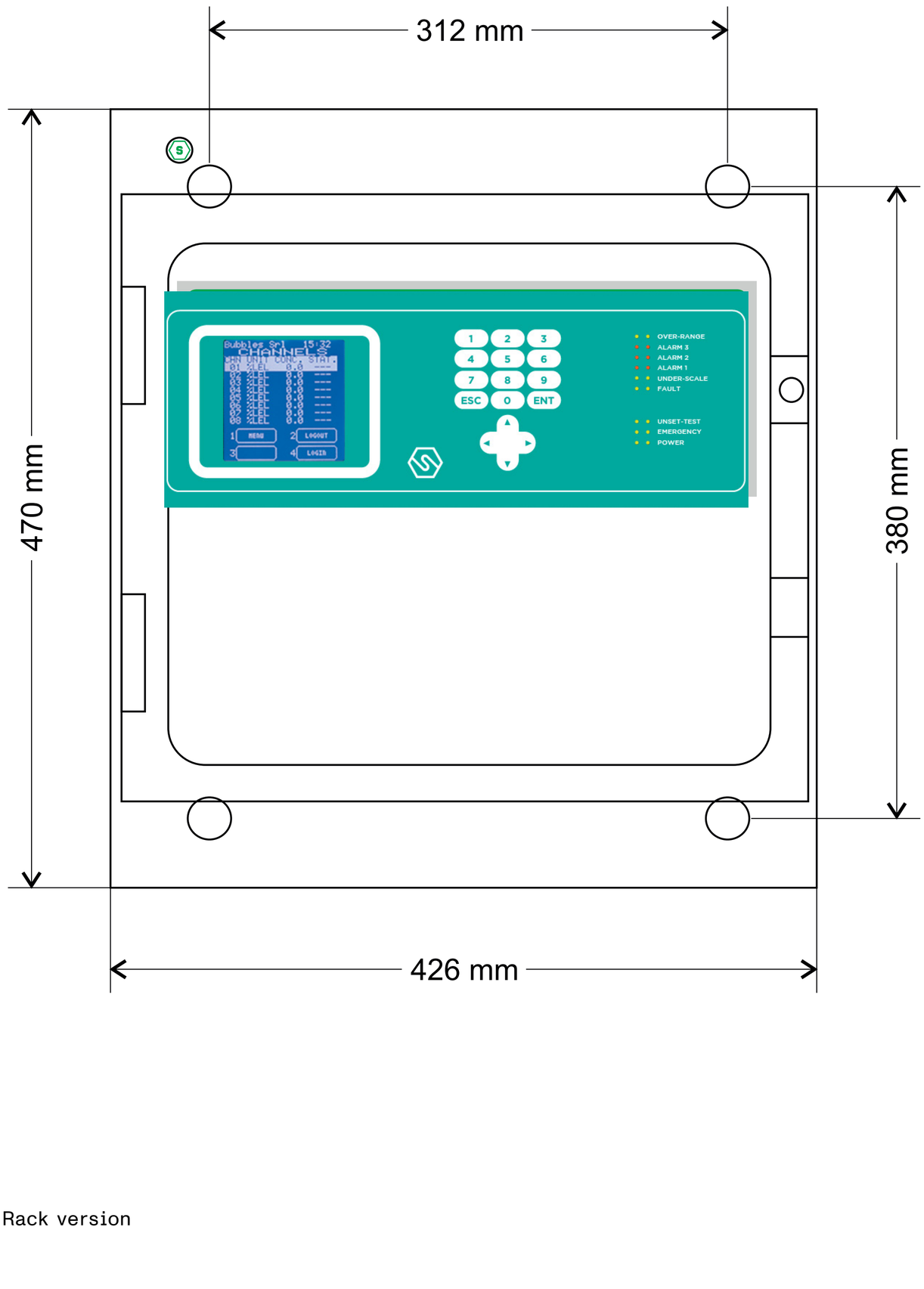
Compliance	
EMC	EN 50270:2015
ATEX	ATEX Directive 2014/34/UE EN IEC 60079-0:2018 EN 60079-29-1:2016 + A11:2022
SIL	EN 61508:2010 parts 1, 2, 3, 4, 5, 6, 7 EN 50402:2017

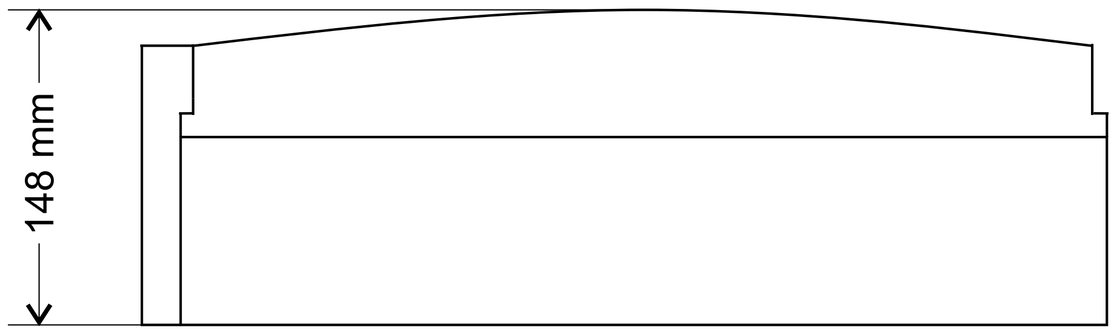
Product codes

STMTS/S2-256B	256 Analog 4-20 mA gas detectors connected through remote 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/S2-256	Rack version of STMTS/S2-256B
STMTS/S2-128B	128 Analog 4-20 mA gas detectors connected through remote 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/S2-128	Rack version of STMTS/S2-128B
STMTS/S2-64B	64 Analog 4-20 mA gas detectors connected through remote 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/S2-64	Rack version of STMTS/S2-64B
STMTS/S2-32B	32 Analog 4-20 mA gas detectors connected through remote 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/S2-32	Rack version of STMTS/S2-32B
STG/MTSS2-CONF	Windows PC software for MULTISCAN++S2 control panel programming.
STG/IN4-OUT4-S2	Remote module with 4 inputs 4-20mA and 4 output relays
STG/IN8-S2	High safety 8-input remote module
STG/OUT16-S2	High safety 16-output remote module
STG/8REL	Plug and play relay board to be connected to STG/OUT16 to provide 8 relay outputs
STG/SER++	Additional Serial board to implement serial lines
STG/TCPIP-C	TCP/IP interface for LAN connection
AL11/276V5	Metal Cabinet with enclosed a 27 Vdc 5A 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

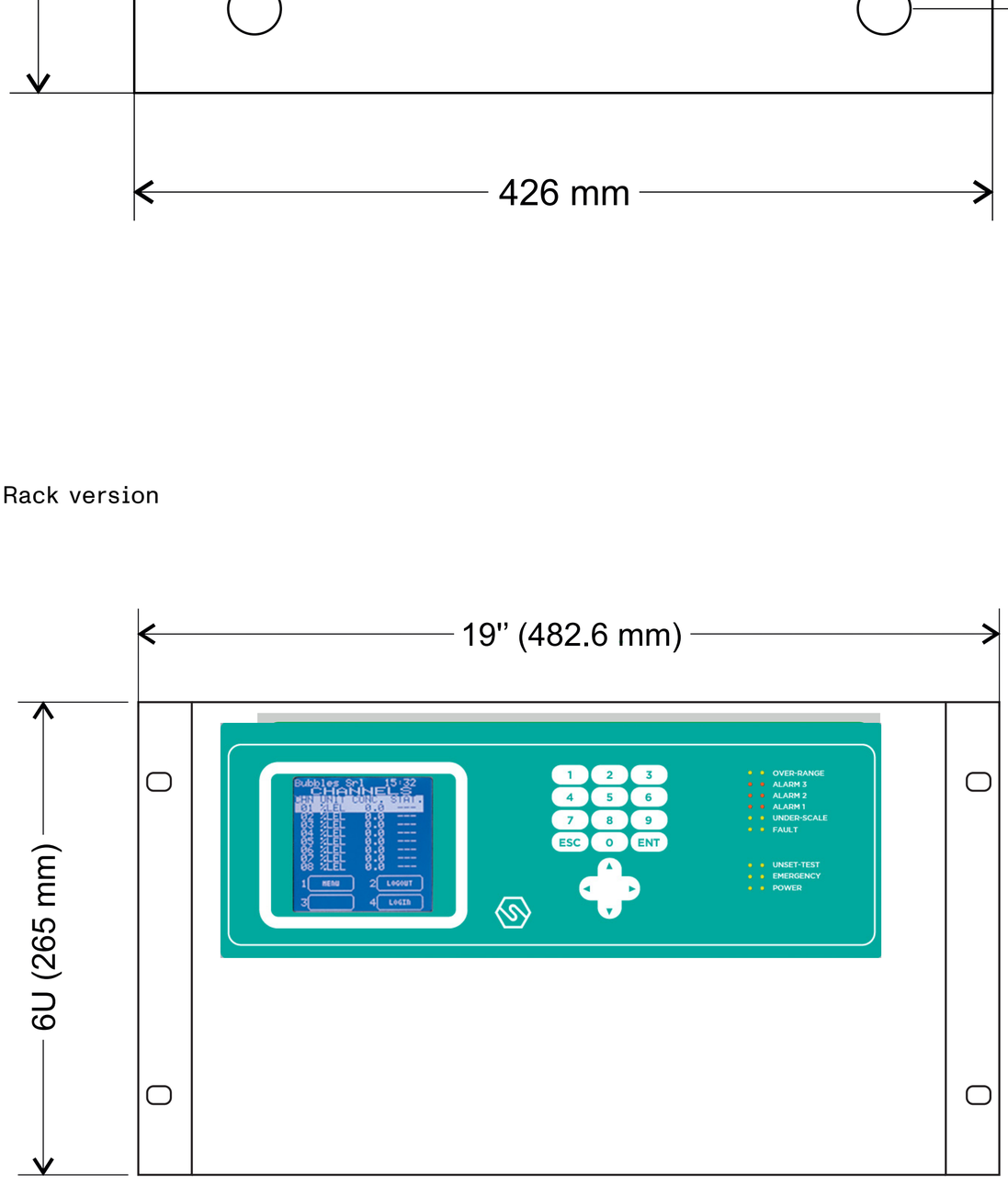
Mechanical drawings

Box version





Rack version





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