

SDAMNet

Alarm and measurement monitoring system for medical installations



Medical gases pipeline system with 2nd stage pressure regulators on each floor

System performs notification of clinical alarm in storage areas and pipeline distribution systems for medical gases (O₂, Med Air, N₂O, CO₂, Vacuum).

Local units are distributed in the hospital ward at each floor and in the gas storage gases area to monitor alarms and measurements.

The **SDAMNet** system can include following units connected in local network:

SDAL-MED L5	5 digital inputs for ON/OFF pressure sensors (min. / max. pressure switches);
SDAL-MED L5C	5 digital inputs for ON/OFF pressure sensors (min. / max. pressure switches);
SDAL-MED L9	9 digital inputs for ON/OFF pressure sensors (min. / max. pressure switches);
SDAL-MED V4	4 digital inputs for NAMUR or ON/ OFF sensors detecting the valve status (open/closed);
SDAM-MED A5	5 analog inputs for 4-20 mA pressure transducers (min. / max. alarm and current value);
SDAM-MED D10	10 digital inputs for ON/OFF pressure sensors (min. / max. pressure switches);
SDAM-MED R	Repeater for SDAM-MED D10 or SDAM-MED A5 unit;

All alarm units comply with ISO 7396-1 and EN 60601-1-8

A Windows software tool allows setting all the operating parameters of SDAM-MED units by a PC: input parameters, input id), range and alarm thresholds (analog inputs only), input operation (NC / NO, digital inputs only), alarm priority, output relay operation and destination area.

The same tool also allows setting the destination area of SDAL-MED units and the input parameters of the SDAL-MED V4.

SDAM-MED and SDAL-MED units are supplied for wall and flush box mounting integration.

SDAM-MED and SDAL-MED units can share the same RS485 local network **SDAMNet** by wired or wireless connection (LoRa radio); all data can be collected by one or more SDAMGUARD-MED units.

The ModBus gateway A2M Converter resends all the data that pass through the local network **SDAMNet** towards a further local interface with SCADA (read only).



The WebAPP CrioSystem Supervisor (CSS) supplies the remote monitoring of the **SDAMNet** units using PCs or mobile devices and a simple Internet browser as client interface, like Chrome, FireFox, Mozilla, Safari or Edge, without download or user-level installation.

Data transfer between peripheral units and server occurs by peripheral modem MOD-COM through M2M SIM Card, using GPRS network and TCP-IP protocol: that ensures very high reliability of data communication and low cost of connectivity.

Operators receive automatic alert notifications by phone calls and voice messages as well as SMS and e-mail. Operators can open WebAPP CSS and get all the information available concerning SDAM-MED and SDAL-MED units in real time. Every access is protected by login and password.



WebAPP CSS supplies the following advantages:

- ✓ More cost-effectiveness and prompt technical support
- ✓ Fuel economy
- ✓ Avoiding technical interventions for uncritical or false alarms
- ✓ Increasing safety thanks to the real time remote monitoring