

# LIQ-SWITCH



Switch over system for N2 liquid tanks

### **FUNCTIONS**

- Real time monitoring measures and pressures through LCD display with backlight
- Alarm signaling through blinking visual and acoustic indicators with recovery time programmable by the user
- Programming by encoder with button integrated
- Alarm acoustic signal with acknowledge pushbutton on the front panel
- Solenoid valves status indication on the front panel
- Automatic switch over functions for empty tank, through integrated solenoid valves
- Set points programmable by the user for minimum level, low operating tank pressures, high and low supply output pressure
- N2 Supply output status available on front panel with Liquid or Gas LED indication
- Manual function for maintenance operations
- Proprietary network protocol CRIONet
- Remote monitoring for measures and alarms through optional modem card PSTN or through external MOD-COM modem for PSTN/ GSM network
- Auxiliary output switch for external cumulative alarm indicator or hooter

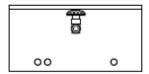
## **TECHNICAL SPECIFICATION**

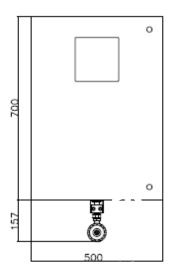
Power supply	230Vac 50/60Hz, P max 50 VA, fuse 1 A
Flow range	13 l/min.
Operating pressure	Max 5bar
Visual indication	Display 4 lines x 20 characters, backlight Operating alarm: yellow LED 20x10 mm. Emergency alarm: red LED high efficiency 20x10 mm. Fail: red LED diam. 5 mm. Communication: yellow LED diam.5 mm
Alarm sound	Magnetic speaker, max 95 dB @ 1 meter
Input	Analog inputs 4-20 mA: -N°1 Inputs PT100 -N°2 Inputs tank pressure -N°2 Inputs tank level -N°1 Input supply output pressure Digital input: -n°1 Input Power Down (UPS)
Auxiliary output switch	N°1 Relay Contact, Vmax. 250 Vdc/Vac, Imax 100 mA, N.C. or N.O. operation
Pneumatic connections	N°2 F 1/2" NPT (liquid phase tank output) N°1 F ½" NPT (output supply)
Local network interface	Proprietary protocol CRIONet on insulated bidirectional RS485
Integrated optional communication card	Socket modem card for PSTN phone network
Housing	Stainless steel for wall mounting, dim. 500 x 700 x (p) 250 mm, internal devices waterproof IP55
Weight	45 Kg.
Operating temperature	-2060°C
Reference standards and directives	Directive EMC DE 89/336/CE Directive Low power DE 73/23/EC, <b>C</b> €



#### **Data Sheet**

## **OUTLINE**







# **ORDERING INFORMATION**

Code	Descpription
0001-09-001	LIQ-SWITCH MED: Switch over system for liquid N2 tanks.
0001-08-052	<b>Transfer Hose for inlet liquid:</b> 1/2" INOX 304 type UNX connection M 1/2" NPT- F3/4" UNF L=100cm. with hand protection through spring 15cm
0001-08-053	<b>Transfer Hose for outlet liquid:</b> 1/2" INOX 304 type UNX connection M 1/2" NPT- F1/2" UNF L=100cm. with hand protection through spring 15cm
0050-01-002	<b>SOCKET MODEM PSTN:</b> integrated socket modem card for PSTN phone network