LOGSTOR Detect
CNL 1-4
Secure your investment of the pipe system

CNL 1-4

The CNL1-4 monitors the pipe systems with remarkable precision. This surveillance unit helps limit damages and has a preventative effect on the network.
Now available with 4G communication.

The CNL1-4 NiCr surveillance unit uses resistance measurement to monitor pre-insulated district heating pipe networks. The CNL1-4 unit features LAN/4G modem and/or relay outputs for the transmission of measurement values, if appropriate, and can be used with LOGSTOR XTool & WISION graphic surveillance software.

The surveillance unit is linked to the NiCr wires in the pipe network. It monitors ohmic resistance to provide information about moisture which may have penetrated the pipe network from the surrounding soil or leaked from the service pipe.

In addition, the CNL1-4 features a built-in function to register any breaks in the alarm wires or short-circuits in the system.
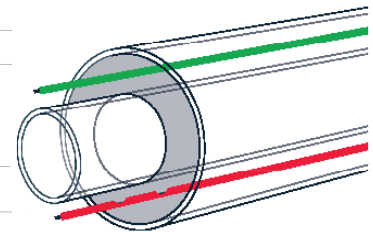
The CNL devices are available in 2 versions depending on the pipe system and the requirements for monitoring:

Monitoring of NiCr alarm wires.

CNL1-4 Detection of moisture and wire break (4 channels)
CNL 2 - Detection of moisture and wire break as well as location of error location (2 channels).

CNL 1-4 – Specification

Dimensions	L x W x H : 215 x 125 x 70 mm
Weight	0,8 kg
Power Supply	Standard with transformer for 110 / 230VAC or Lithium Battery Pack
Power consumption	< 5W
Filed of application	−20°C–+70°C
Cable connection	Installation cables IP67 sealing class - Polycarbonate, halogen free
Placement	The detector should be installed indoors in dry and frost-free surroundings
Certifications	CE and ETL approved. CSA / UL approval can be delivered on request

CNL 1-4 – Features

Four channels
4 outputs/channels, each with a monitoring range of 1700 m pipe corresponding to 1700 m NiCr wire (red).

Acoustic/visual signal
Transmits a visual and acoustic signal if detection level is exceeded.

Sabotage protection
Possibility of sabotage protection.

Setting the alarm level
Manual setting of alarm levels for isolation values. All versions of CNL can be remotely controlled and set, as the detector communicates via 4G.

Wire resistance
The loop wire resistance is measured in the range 0-10 KΩ. Wire fracture when measured > 10 KΩ.

Insulation resistance
Insulation resistance is measured in the range of 10 kΩ - 10 MΩ.

Batter Package
CNL1-4 works with Lithium Battery Pack.

Localisation
CNL1-4 does not support localisation of fault. Requires CNL2 model.

Level monitoring
Possibility for level monitoring (4 levels).

Communication
Versions with "G" are equipped with 4G as well as antenna, making it possible to communicate via LOGSTOR Hosting to XTool software.

SRO/SCADA
Output for analogue signal. Alternatively, it is possible to connect via OPC Service to SRO / SCADA.

First Issue | 01/2025