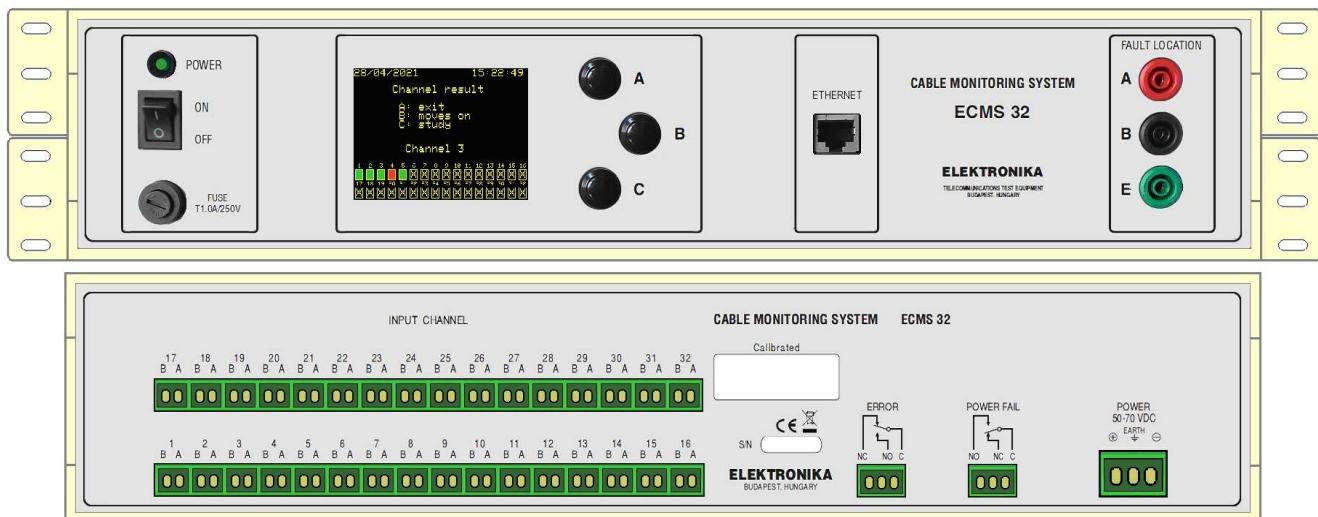


FRONT AND REAR VIEW



APPLICATION AND FEATURES

The **ECMS 32 MONITORING SYSTEM** is a 60 V battery-operated instrument built in a 19" rack for monitoring maximum 32 telecom cables. The far ends of the tested pairs should be short-circuited.

The bridge-unit of the instrument performs continuously repeated loop resistance and insulation resistance measurements between the wires and the ground on each connected pair.

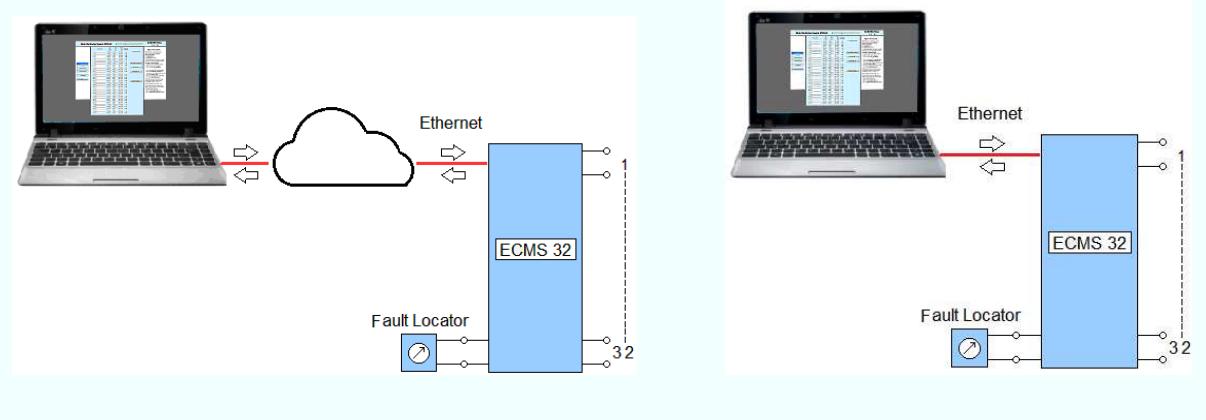
The operability of telecommunication cables is essentially guaranteed by the tightness of the cable jacket against the ingress of moisture. Usually moisture-sensitive wire pairs are used for monitoring.

ECMS 32 compares the measured insulation and loop resistances to preset limit values. The violation of limits is indicated on a display and activates a potential-free relay contacts for remote transmission the alarm signal.

ECMS 32 has an Ethernet interface to connect a PC or establish connection to a remote operator. The instrument acts as a HTTP server.

The Ethernet connection provides useful tools for the operator to:

- Activate cables and deactivate the currently not used ones.
- Preset the limit values.
- Enter the name (identifier) of cables.
- Get detailed information about the current state of cables
- Get detailed information about the last 250 monitoring cycles
- Interconnect the faulty cable and the built in TDR unit
- Interconnect the faulty cable and an external fault locator



SPECIFICATIONS

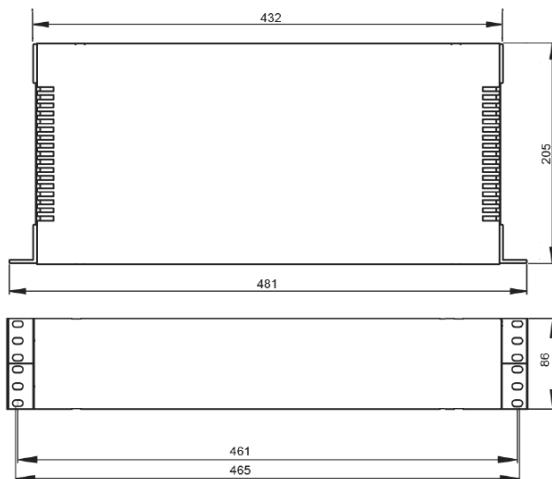
Loop resistance measurement	Time Domain Reflectometer
Measuring range..... 10 Ω to 1 kΩ	Measuring ranges 640 m to 16000 m
Measuring time < 20 sec	Pulse width 30ns to 3μs
Accuracy ±1 % ±0.5 Ω	Pulse amplitude:..... max 10Vpp to open circuit
Insulation resistance measurement	Gain control..... 0 to 90 dB in 6 dB/steps
Measuring voltage 100 V	Propagation velocity (V/2) 50 to 150 m/μs
Measuring range..... 1 MΩ to 1 GΩ	Resolution 1 m
Measuring time < 40 sec	Accuracy 0.2% of range
Accuracy 1 MΩ to 50 MΩ 5%	Measuring modes New Test
50 MΩ to 300 MΩ 10%	New Test & Saved Result
	Saved Result
	Input protection 600V RMS 50 Hz

GENERAL SPECIFICATIONS

Power Supply	Ambient temperature ranges
Voltage 60V DC	Reference +23 ±5°C, Rel. humidity 45% to 75% *
Display 320 x 240 color LCD TFT	Normal operation 0 to +40°C Rel. humidity 30% to 75% *(<25g/m³)
Connectors	Limits of operation -5 to +45°C Rel. humidity 5% to 95% *(< 29 g/m³)
For power supply and GND 3 pole connector	Storage and transport -40 to +70°C Rel. humidity 95% at +45°C *(<35g/m³)
For tested cables 32 pieces of 2 pole connectors	
For alarm 2 pieces of 3 pole connectors	
For fault location. 3 pieces of 4 mm banana sockets	
For data transfer Ethernet socket	
	Weight ~2 kg

* Without condensation

SIZES



ORDERING INFORMATIONS

CABLE MONITORING SYSTEM ECMS 32 472-000-000

Including:

Operating Manuals

Connector set consisting of:

- 32 pieces of 2 pole sockets (for tested cables)
- 2 pieces of 3 pole sockets (for alarm)
- 3 pole socket (for power supply and ground)