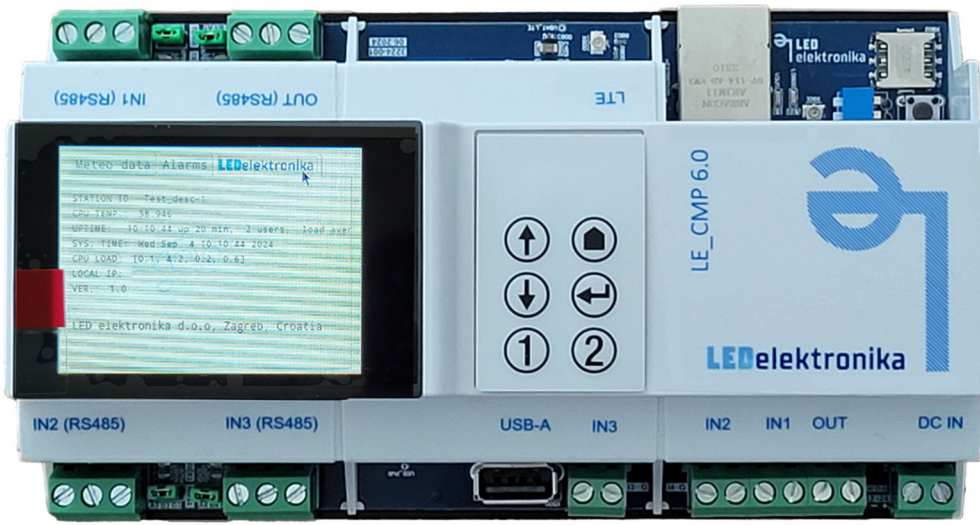


## LE\_CMP 6.0



### Technical characteristics

Housing	Industrial housing for mounting on a DIN rail
Dimensions (WxHxD)	161 x 90 x 66 mm
Power supply (input)	Power supply 9 - 36 VDC, maximum consumption 600mA @ 12V or 230 VAC (optional)
Protection	Protected by built-in auto-resettable fuse, suppressor diode and reverse polarity protection circuit.
Operating temperature range	from -40°C to +80°C
Protection type	Controller IP20, housing IP65

### Communication

Type	4 optically isolated RS-485/RS-232/SDI-12 ports with an isolation level of at least 500V DC. Additional protection with suppressor diodes and X/Y capacitors. They serve to connect the sensor interface and for communication with the superior software. Possibility to upgrade with an additional 4 RS-485 ports using an additional module (4ser).
Digital input	Up to 4, changeable by parametrization
Analog input	1 analog input 0-30V 1 analog input 4-20mA
Output	12 VDC, up to 2, changeable by parametrization

USB	1 USB type A connector for connecting standard USB peripherals
HDMI	1 HDMI connector (primary purpose service work)
Screen	Built-in 2.4" 320x240 dot screen for local display of measured values and sensor status and touch screen controller for user interaction with the display on the screen.
Firmware	Designed and developed in-house
Controller programming language	Python
RJ45	Ethernet 10/100
Optional	LTE option (built-in modem on the controller) WiFi option (built-in modem on the controller) Bluetooth option (built-in modem on the controller)
Configuration	Local configuration via the built-in web interface or using an ssh terminal
Protection	Protection of all inputs and outputs with suppressor diodes
Norms	IEC 61326, IEC 61000

## Additional features

Voltage measurement	Via controller
RTC	NTP(internal) and GPS(external)
Clock accuracy	± 3 min/year
Flash memory	8 GB eMMC
External memory	Via USB(microSD, SD, SSD)
File format export	JSON and CSV
REST API data reach	JSON and CSV

## Measured values

Values	<ul style="list-style-type: none"><li>- temp. road surface (from -40 to + 80 (°C))</li><li>- temp. inside the pavement (from -40 to + 80 (°C))</li><li>- freezing point of NaCl (from -40 to + 0 (°C))</li><li>- thickness of the water layer (from 0 to 10000 (um))</li><li>- NaCl salt concentration (from 0 to 100 (%))</li><li>- amount of ice (from 0 to 100(%))</li></ul>
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- friction (from 0 to 1)
- road condition (see table)
- amount of NaCl salt (from 0 to 100 (g/m<sup>2</sup>))
- temp. pavement surface
- freezing point
- NaCl salt content
- temp. ray
- dew point
- relative air humidity
- relative air pressure (APS)
- wind speed (m/s)
- average (wind gusts) (m/s)
- wind direction
- amount of precipitation (absolute)
- amount of precipitation
- type of precipitation
- rainfall intensity -> 820 - rainfall intensity (mm/h)
- visibility (m)