Optical characteristics:

- type: single sided, textual / graphical, full matrix, outdoor LED display
- technology: high brightness SMD PLCC2 LED
- color: amber (yellow-orange). Other colors available on request.
- viewing angle: 120 ° horizontally / 60 ° vertically
- brightness: > 5.000 cd/m2
- resolution: 32 x 192 px (v x h)
- pitch (distance between LEDs): 5 x 4 mm (v x h)
- viewing field dimensions: 160 x 768 mm (v x h)

Communication and displaying:

- communication interface options: Ethernet, serial (RS232, RS485), GPRS/3G
- communication protocol: NTCP – Novatronic textual communication protocol with UTF8 encoding (covers all European alphabets plus more) and embedded graphic functionality, or periodical XML file download with predefined structure. Accented characters supported.
- displaying: possibility do divide whole graphic display area on certain number of independent fields; individual control of each field - displaying text and/or graphic with various effects (scroll, reveal, blink, effects synchronization..)
- fonts: numerous fonts in various heights and shapes. External font loading via communication interface.
- max. number of textual rows: 4 if each textual row is 8 pixels high, 3 if each textual row is 10 pixels high, or 2 if each textual row is 16 pixels high
- max. number of characters per row: 20 characters in static text using 16 px high font (80 mm), more than 20 characters if smaller fonts used (number of characters increases proportionally as font height decreases). 256 characters in scrolling text.
- luminance adjustment: automatic luminance adjustment (brightness) according to ambient illuminance, plus manual (via comm. interface) upper and lower limits adjustment

Electrical characteristics:

- operating voltage: 230 V AC, optionally 110 V AC, 50 Hz
- power consumption: Maximum consumption of complete device (all LEDs on full brightness: 330 W. Nominal consumption: 115 W.
- power protections: surge, noise, power failure protection
- residual current circuit with overcurrent protection installed

Environmental and Housing characteristics:

- operating temperature: -30°C - +60°C
- internal temperature control – temperature measurement inside the device and adjustable (via communication interface) critical internal temperature levels which trigger luminance and power consumption control and switch off device in case of overheating
- heater/cooler with thermostat installed inside the device
- humidity: 95%
- anti glare, tinted polycarbonate on front of the viewing area
- condensation free, pressure compensation modules installed
- housing type: vandal proof, coated aluminum, corrosion resistant
- housing ingress protection: IP55
- corrosion resistance:EN60068-2
- impact protection: IK10
- vibration conformity: in accordance to EN60068:2-64
- **CE** mark
- dimensions: 270 x 900 x 131 mm (h x w x d)
- life cycle: 80.000 hours