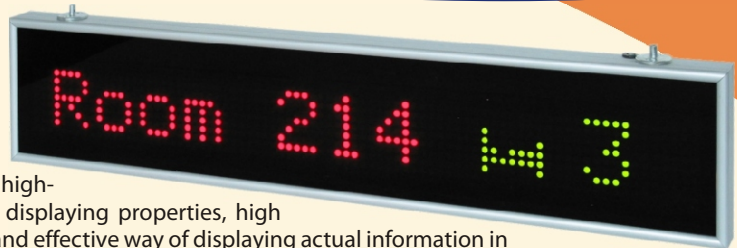The TDU series large-size text displays are programmable electronic devices for displaying static and dynamic textual information. They are manufactured on the basis of high-brightness LED elements, which ensure their very good displaying properties, high endurance and long lifetime. These devices provide quick and effective way of displaying actual information in real time. They are primarily used as output display devices in electronic information systems when there is a need to provide visual information over a long distance. Their technical parameters are adjusted to the specific application requirements, in which these displays are used.

The TDU series displays are produced in broad range of size formats. Modular construction of these devices makes it possible to manufacture displays with various number and sizes of information lines. According to required display format, display LED modules with different parameters are used. Individual types of display modules are differentiated by their:
- Size and display points' construction
- Type and parameters of used LEDs
- Format of LED display matrix

Desired display parameters can be achieved by suitable selection and placement of display modules (number of rows, length of rows, readability distance, colour of displayed text, display area brightness, etc.).

Important parameter, which affects the construction of TDU displays, is the type of the environment in which this device will be used. Displays' casing, safety of its electronics and display LED modules parameters are designed according to the environment type (outdoor, indoor, industrial, office, etc.).

The TDU display area is covered with PERSPEX optical filter, which increases the contrast and provides an antiglare surface of the display area.

The TDU display compatibility with various electronic devices is provided by means of broad range of communication interfaces, which these displays can be equipped with. Available are communication modules for local, or long distance display control through many different types of serial communication lines, communication interfaces and even wireless communication networks.

Technical specifications

Number of lines	1 to 16
Displayed row matrix height	45 mm to 600 mm
Row length	224 mm to 7200 mm
Readability range	10 m to 300 m
Communication interface	RS232, RS485, Current Loop 20 mA, Ethernet TCP/IP, Profibus DP, LonWorks, WiFi, parallel, phone modem, GSM modem
Casing (class of protection)	IP 20 to IP 55

The programming features, which are implemented in the TDU displays control module, provide broad utilization of their displaying characteristics. The textual information can be displayed in various fonts and colours (applies to colour display types). The text messages can be displayed as static, moving, flashing, etc. as needed. The control program can automatically regulate the display's brightness and optimally adjust its level according to surrounding light condition by means of built light sensor. The control program can be changed without technical intervention into display using the serial communication line, or communication interface, onto which display is connected.

Applications of TDU large-size text LED displays

TDU display in the railway station underpass

TDU display on the railway station platform

Currency exchange rates display in the bank interior

TDU display for truck entrance navigation
in the manufacturing plant

Circular TDU display at the city centre

TDU display on the ship lock control tower