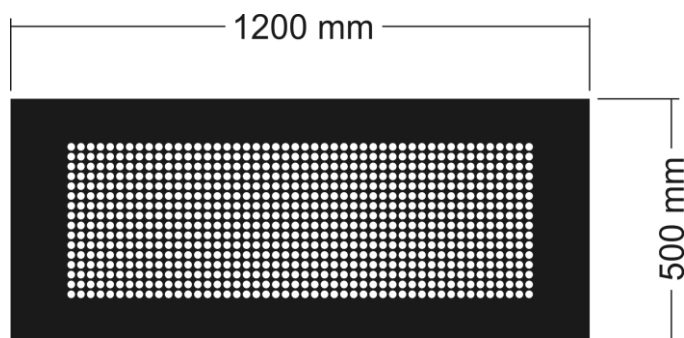




## DMV FULL COLOR MATRIX SIGNS

### TRS-RTNM-P1V4-16x48-W-LS-ED-ETH



#### Main features

<b>Certificate</b>	EN12966-1:2005+A1: 2009.
<b>Type of sign</b>	Single color (white) VMS for alphanumeric characters.
<b>LED</b>	LEDs with high luminous intensity and long life time.
<b>Maintenance</b>	Hardware is designed so that each part can be easily removed and replaced.
<b>Brightness control</b>	Brightness could be: a) Automatically adjustable according to external illumination measured by light sensor. b) Automatically adjustable according to actual day time using precise algorithm. Precise daytime brightness algorithm depends on geographical location where the sign is installed, taking into account daytime changing during whole year. c) Pre-adjusted or set from the system.
<b>Temperature monitoring</b>	The VMS equipped with sensors for continuously measuring the temperature inside the cabinet. Temperature monitoring and control system provides optimal working temperature and prevents condensation or component overheating. System also protects LEDs from temperature peaks that might happen during device operation.
<b>Internal time</b>	VMS has real time clock with 2ppm precision.
<b>Operation logs</b>	Logs system provides a lot of information about working conditions. Logs are stored in VMS internal memory and could be depend on implemented hardware: VMS reset, maximal and minimal temperature in the cabinet, cooling and heating system activation, messages displayed, malfunctions as – short circuit, open circuit and thermal error



for each individual LED per each color, light sensor malfunction, overheating, communication errors.  
Precise time when each log happens also is recorded in the VMS memory.

<b>LED errors</b>	LED error detection feature. LED self-error detection and thermal error. Error history is stored into sign memory. Self-diagnostic is invisible – does not affect display information.
<b>Interfaces</b>	Ethernet
<b>Protocols</b>	UDP or TCP/IP oriented communication protocol. Setup of IP parameters over network (IP address, mask, gateway address), without opening the sign. Firmware update over network.
<b>Power consumption</b>	~ 80 W
<b>Power supply</b>	230VAC/50Hz

### Mechanical features

<b>Housing dimensions (VxH)</b>	500 x 1200 mm
<b>Approximate weight</b>	~ 20 kg
<b>Material</b>	Aluminum AlMg3, powder coated, resistant to aggressive atmosphere. 3 mm thickness.
<b>Housing color</b>	Gray, RAL 9007
<b>Front color</b>	Black, RAL 9005
<b>Physical performance</b>	T1, T2, T3 / P3 in accordance with EN12966
<b>Resistance to pollution</b>	D3 in accordance with EN12966
<b>Opening</b>	From the front side.

### Optical features

<b>Optical performance in accordance to EN12966</b>	Luminous intensity: class L3 / L3(*) / L3(T) Contrast ratio: class R2 Beam width: class B4 Color: class C2
<b>LED currents</b>	Constant current LED drivers, stable luminance, independent of the mains voltage tolerances.
<b>LED protection</b>	UV resistant lenses for each LED.

### Display features

<b>Resolution</b>	16 x 48 pixels
<b>Pixels pitch</b>	20 mm



**Matrix field** 320 x 960 mm

**Pixel composition** 1 LED

### Operation

#### Text messages

VMS is able to display different character heights of alphanumeric characters.

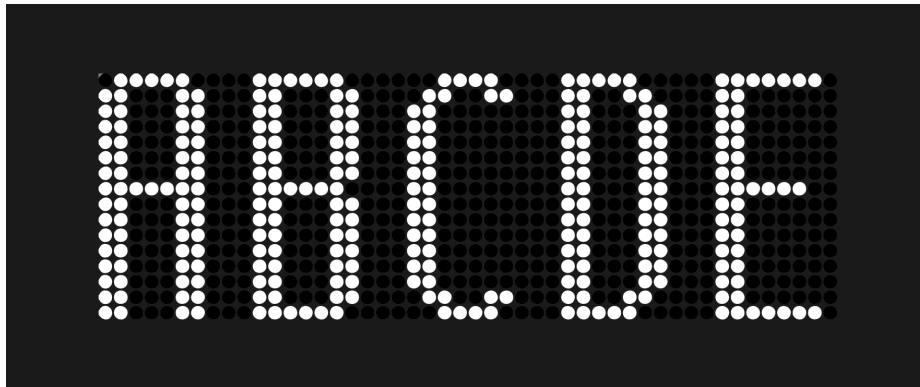
A number of available text messages and pictograms in display memory.

User can create its own message, font or pictograms.

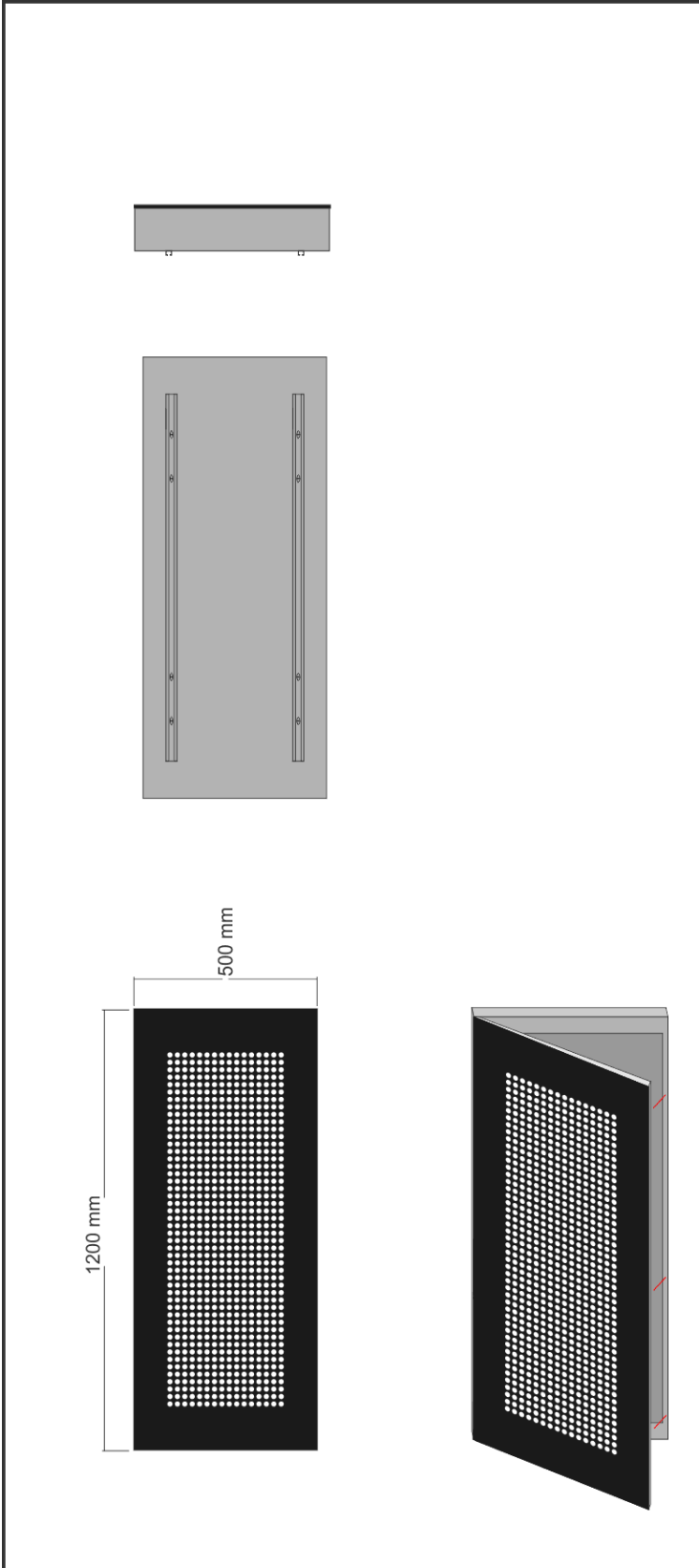
VMS supports English and Czech characters.

Possible to change alternatively 2 or more messages and pictograms with programmable intervals.

### Possible display scenario



## Dimensions and preliminary layout



### PRELIMINARY DRAWINGS

Type of sign	Single color VMS	
Dimensions	500 x 1200 mm	
Model:	TRS-RTNM-P1V4-16x48-W-LS-ED-ETH	

\*Please do not make mounting constructions based on these preliminary drawings.  
The final sketch will be sent afterwards in agreement between manufacturer and customer.