



# LED Boards

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Industrial visual boards



## LED Boards

### Description of the devices

**LED Boards** are devices designed to display information and passenger messages sent via AWIA SDIP®. New control software for **LED Boards** enables to display both static and dynamic texts.

**LED Boards** are controlled by Ethernet, which allows communication, configuration, programming and diagnostics without having physical access to the board.

**LED Boards** are equipped with external light sensor whereby the brightness of diodes depends on external lightning. In the case where the board does not display any texts, the control system turns off diode's power supply module, what leads to decreased power consumption by the board.

### Compliance with standards

<b>PN-EN 50155</b>	Railway applications- Electronic equipment used in rolling stock
<b>PN-EN 50121-3-2</b>	Railway applications- Electromagnetic compatibility
<b>PN-EN 45545-2+A1</b>	Fire protection in rail vehicles. Part 2: materials and elements on the combustion properties at HL1, HL2 and HL
<b>PN-EN 61373</b>	Railway applications – rolling equipment
<b>TSI PRM pkt 5.3.2.7</b>	Internal and external displays

### Types of LED boards

#### **Multicolor LED Boards (full color)**

<b>Raster 3x3</b>	32x160, 32x192, 64x96, 64x160, 64x288 pikseli
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#### **Amber/White LED boards (monochrome)**

<b>Raster 5x5</b>	32x192, 32x224, 40x160, 40x128, 48x64, 48x96, 48x160 pikseli
<b>Raster 6x5</b>	32x160, 32x256, 40x224, 32x224, 32x224 pikseli





## LED Boards

### Technical parameters

**Amber LED:** Monochrome - Amber

**White LED :** Monochrome - White

**Multikolor LED:** RGB - 4096

Nominal supply voltage	24 V DC
Voltage range	16,8 ÷ 31,2 V DC
Brightness of diodes	> 4500 cd/m <sup>2</sup>
LED assembly technology	SMD
Configurable number of lines	Yes

External light sensor	Yes
Maintained interfaces	Ethernet 100 Mbit/s ( M12)
Communication protocol	TCP/IP, UDP
Scrolling text	Yes
Operating temperature range	-40°C ÷ +60°C

### Types of LED boards

#### Raster 3 mm

Series of types - 32x:	px	dimensions (mm)	
LED Board RGB	32x192	118,4 x 602 x 28,5	AL.
LED Board RGB	32x160	118,4 x 506 x 28,5	AL.

#### Series of types - 64x:

LED Board RGB	64x288	220,4 x 890 x 28,5	
LED Board RGB	64x160	220,4 x 506 x 28,5	
LED Board RGB	64x96	220,4 x 314 x 28,5	AL.

#### Raster 6x5 mm

Series of types - 32x:	px	dimensions (mm)	
LED Board amber	32x224	210,8 x 1146 x 28,5	
LED Board white	32x224	210,8 x 1146 x 28,5	
LED Board amber	32x128	214 x 664 x 39	
LED Board RGB	32x64	210,8 x 346 x 28,5	AL.
LED Board HYBRYDA RGB+amber	32x64 RGB 32x160 amber	211,4 x 1146 x 28,5	AL.

#### Series of types - 40x:

LED Board RGB	40x160	258,8 x 826 x 28,5	AL.
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## LED Boards

### ✕ Types of LED boards

Series of types - 24x:	px	dimensions (mm)	
LED Board <b>amber</b>	24x224	140 x 1146 x 28,5	AL.
LED Board <b>white</b>	24x224	140 x 1146 x 28,5	AL.

Series of types - 32x:	px	dimensions (mm)	
LED Board <b>amber</b>	32x192	180 x 986 x 28,5	AL.
LED Board <b>white</b>	32x192	180 x 986 x 28,5	AL.
LED Board <b>amber</b>	32x224	180 x 1146 x 28,5	AL.
LED Board <b>white</b>	32x224	180 x 1146 x 28,5	AL.
LED Board <b>amber</b>	32x256	180 x 1306 x 28,5	AL.
LED Board <b>white</b>	32x256	180 x 1306 x 28,5	AL.
LED Board <b>amber</b>	32x160	180 x 826 x 28,5	AL.
LED Board <b>white</b>	32x160	180 x 826 x 28,5	AL.
LED Board <b>RGB</b>	32x224	180 x 1146 x 28,5	AL.

Series of types - 40x:	px	dimensions (mm)	
LED Board <b>white</b>	40x224	220 x 1146 x 28,5	AL.
LED Board <b>amber</b>	40x224	220 x 1146 x 28,5	AL.
LED Board <b>amber</b>	40x160	220 x 826 x 28,5	AL.
LED Board <b>white</b>	40x160	220 x 826 x 28,5	AL.
LED Board <b>amber</b>	40x128	220 x 666 x 28,5	AL.
LED Board <b>white</b>	40x128	220 x 666 x 28,5	AL.

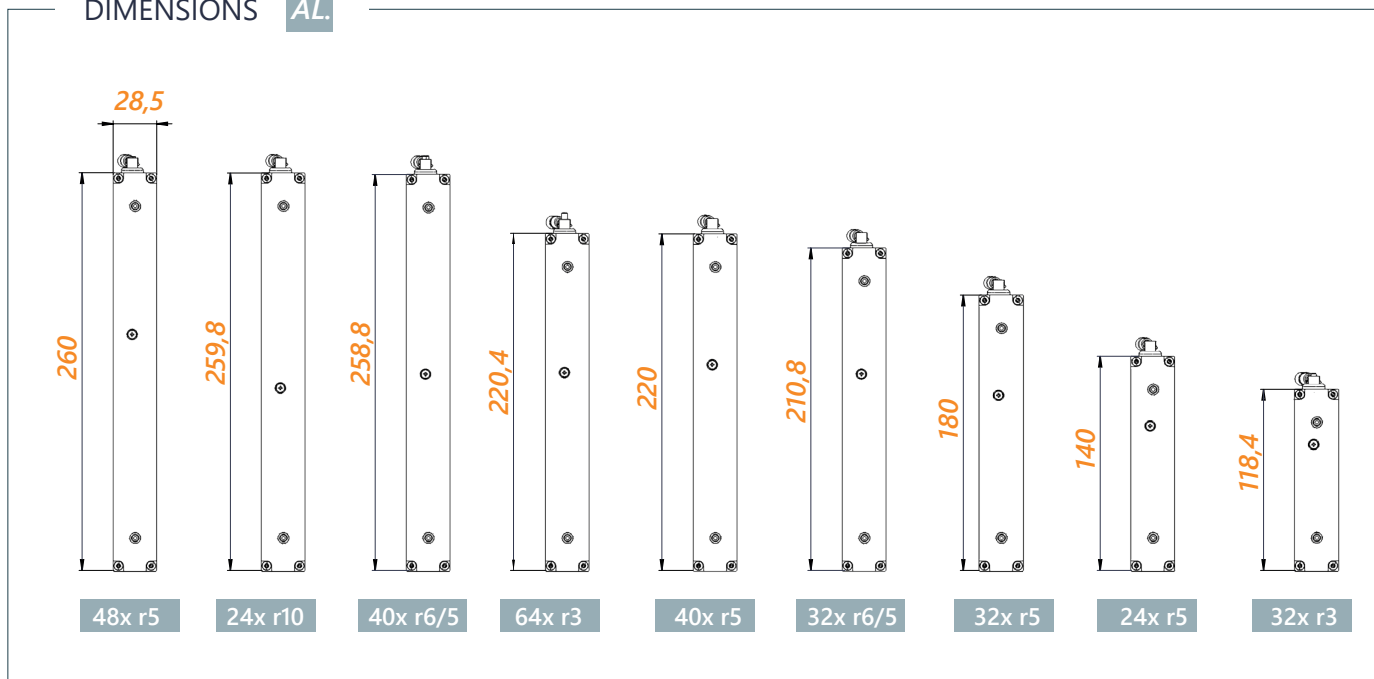
  

Series of types - 48x:	px	dimensions (mm)	
LED Board <b>amber</b>	48x96	260 x 506 x 28,5	AL.
LED Board <b>white</b>	48x96	260 x 506 x 28,5	AL.
LED Board <b>amber</b>	48x64	260 x 346 x 28,5	AL.
LED Board <b>white</b>	48x64	260 x 346 x 28,5	AL.
LED Board <b>amber</b>	48x160	260 x 826 x 28,5	AL.
LED Board <b>biata</b>	48x160	260 x 826 x 28,5	AL.

#### Raster 10 mm

Series of types - 24x:	px	dimensions (mm)	
Tablica LED <b>amber</b>	24x192	220,4 x 890 x 28,5	AL.
Tablica LED <b>white</b>	24x192	220,4 x 314 x 28,5	AL.

## DIMENSIONS AL.



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