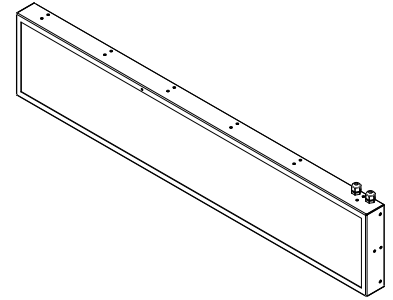


# ALP2200/A

Information LED Panel for Rolling Stock

- **Display area (1072 × 184) mm, yellow LED**
- **Resolution 135 × 24 pixels**
- **RS485 communication interface**
- **Power supply 24 V DC**
- **Fulfill UIC176 requirements**
- **Designed in accordance with EN 50155**



## TECHNICAL DATA

|  |                                   |
|--|-----------------------------------|
| <b>Display area</b>                      | (1072 × 184) mm                   |
| Resolution                               | 135 × 24 pixels                   |
| LED pitch                                | 8 mm                              |
| LED colour                               | Yellow, 590 nm typ.               |
| Brightness                               | Min. 800 cd/m <sup>2</sup>        |
| Observation angel                        | 120 ° *)                          |
| <b>Light sensor</b>                      | 1 ×                               |
| Function                                 | Measuring of ambient light        |
| <b>RS485</b>                             | 1 ×                               |
| Galvanic separation, insulation strength | Yes, 500 V AC/1 minute **)        |
| Connection                               | WAGO231-636/019-000 #)            |
| <b>Geographical addressing</b>           | Separate cable                    |
| Number of bits                           | 4                                 |
| Connection                               | WAGO231-635/019-000               |
| <b>Power supply</b>                      | 24 V DC -30 % to +25 %            |
| Max. power consumption                   | 5 A at 24 V DC                    |
| Peak input current                       | 10 A ##)                          |
| Connection                               | WAGO231-636/019-000 #)            |
| <b>Others</b>                            |                                   |
| Mechanic                                 | Sheet metal cover + polycarbonate |
| Colour of mechanic                       | Grey                              |
| Mounting                                 | 4 × M6 screw from the side        |
| Cover protection rate                    | IP50                              |
| Operating temperature                    | -40 °C to 70 °C                   |
| Storage temperature                      | -40 °C to 70 °C                   |
| Max. ambient humidity                    | < 95 % non-condensing             |
| Weight                                   | 9 kg                              |
| Dimensions (w × h × d)                   | (1111 × 249 × 61) mm              |
| Expected MTBF                            | > 50 000 h                        |

\*) Decline in brightness from the line of observation angle to 50 %.

\*\*) Galvanic separation may not be used for unsafe voltage separation.

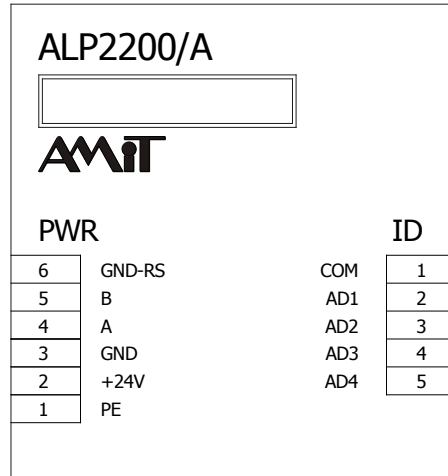
#) Power supply and RS485 communication are on common connector.

##) Duration time of peak input current is less then 5 ms.

## ORDERING INFORMATION

|           |  |
|-----------|--|
| ALP2200/A | LED panel, connector counterparts for service cables (2 pcs), user's manual, warranty card, production test report, insulation test report |
|-----------|--|

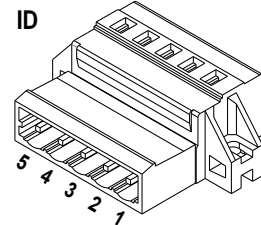
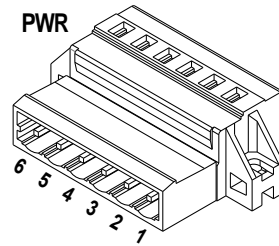
## RECOMMENDED DIAGRAM SYMBOL



## TERMINALS ASSIGNMENT

| Connector | PIN | Signal | Signal description  |
|-----------|-----|--------|---------------------|
| PWR       | 1   | PE     | Unit frame          |
|           | 2   | +24V   | Power supply, +24 V |
|           | 3   | GND    | Power supply, GND   |
|           | 4   | A      | RS485, A line       |
|           | 5   | B      | RS485, B line       |
|           | 6   | GND-RS | RS485, ground       |

| Connector | PIN | Signal | Signal description |
|-----------|-----|--------|--------------------|
| ID        | 1   | COM    | Common address pin |
|           | 2   | AD1    | Address pin 1      |
|           | 3   | AD2    | Address pin 2      |
|           | 4   | AD3    | Address pin 3      |
|           | 5   | AD4    | Address pin 4      |



## PANEL DIMENSIONS AND CONNECTORS LOCATION

PWR and ID connectors are lead out of the information LED panel by 1 m length cables.

