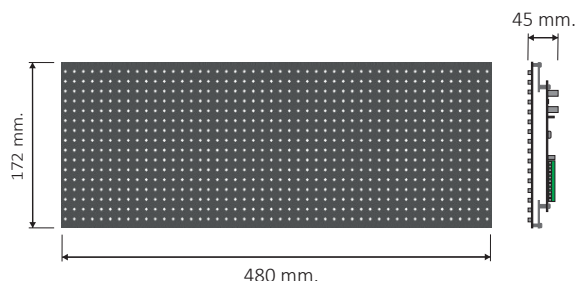



# Multi Color LED graphic panel HGM7-48x16-P10 i K

## Data sheet

### GENERAL FEATURES



#### Technical features

|  |   |
|--|---|
| Model without front panel              | HGM7-48X16-P10 i K  |
| Code                                   | G 100 000345  |
| Operating voltage                      | DC 5 V  |
| Maximum Power Consumption, all LEDs ON | 100 W   |
| Graphic resolution                     | 48 x 16 pixel   |
| LEDs pitch                             | 10 mm.  |
| LED per pixel                          | 1   |
| LED type                               | RGB   |
| Screen dimension                       | 480 x 172 mm.   |
| Colors                                 | 7   |
| Characters per page (basic size fonts) | 16  |
| No. of selectable messages             | 99  |
| GIF animations                         | Si  |
| LEDs quantity                          | 768   |
| Viewing angle                          | 120°  |
| Operating Temperature Range            | 40 C° ~ +70 C°  |
| Storage temperature                    | +5 C° ~ +40 C°  |
| Storage Enviroment Humidity            | RH < 60%  |
| Life Time (temperature Tc = 75 °C)     | 100.000h ( L70)   |
| Warranty ( Download pdf )              |  3 Years |

#### Description

Multi color LED graphic panel, suitable for service messaging. The panel is supplied without front panel, the LED module is supplied in bulk.

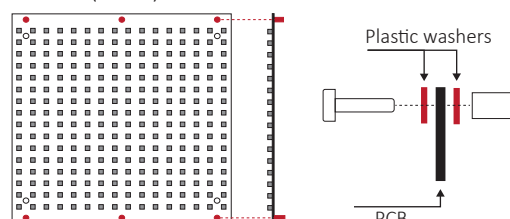
Suitable for installation inside the mini totems of the petrol station, operation in conjunction with the DIS or HDP series fuel price displays, the brightness is synchronized with that of the price displays, in case of autonomous operation, the SLUX01 brightness sensor must be added.

Graphic or text programs can be displayed statically, scrolling, curtain appearance, insertion from top or bottom, fade, random appearance and others ...

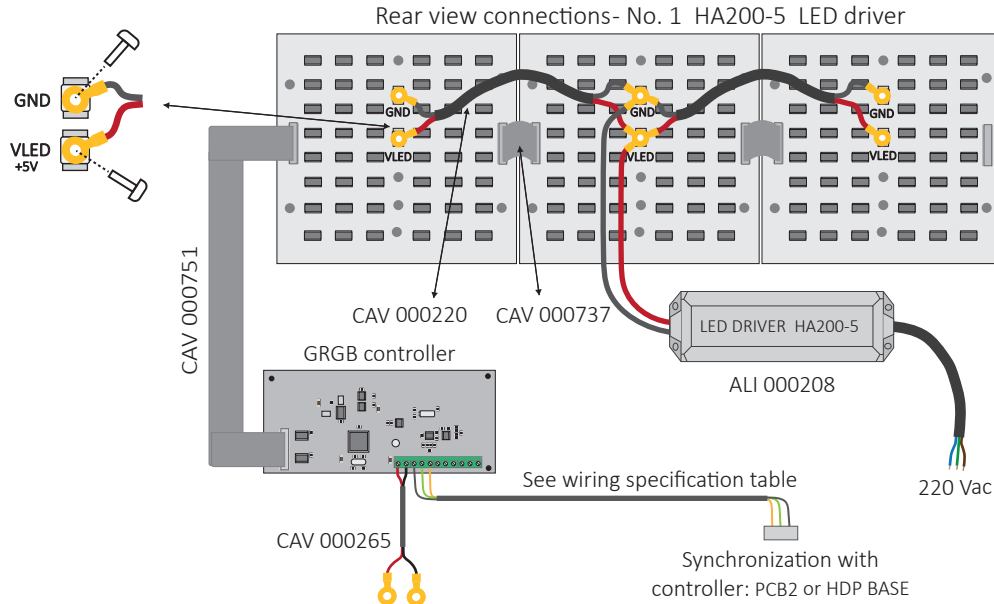
The main programs such as: SELF, SERV, CLOSED, OPEN, STATIC or ANIMATED ARROWS, TO RIGHT, TO LEFT or BOTH are already stored in the GRGB control board. On request it is possible to customize and insert any additional programs with ad hoc texts and graphics within the limit allowed by the graphic resolution of the LED panel, this option is evaluated separately under request. The programs can be recalled with the remote control model: RDC which is the same used for price LED display programming, or through the connection to the POS (when the graphic LED panel is connected with the DIS or HDP fuel price system), or to a PC with which it is also possible to create text programs. and graphs independently.

#### WARNING !!!

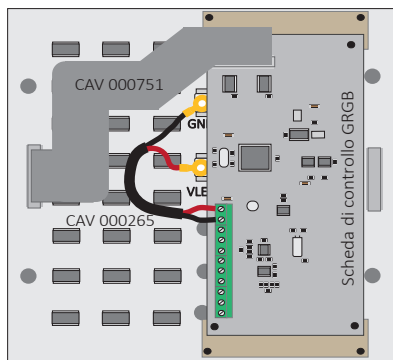
Use the holes in red for fixing, keep the module spaced from metal parts by using plastic spacers. If using metal spacers, please insert plastic washers on both sides of the printed circuit board ( PCB ).



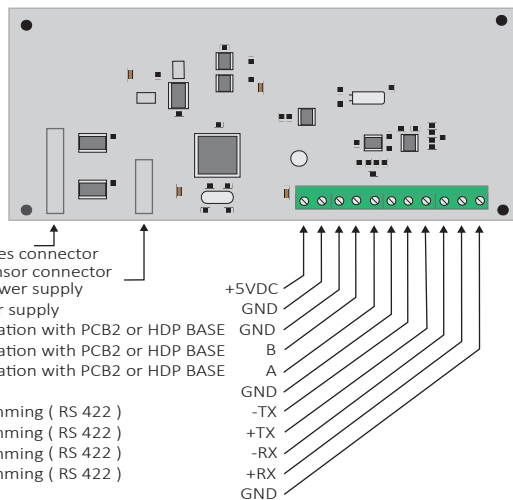
CONNECTIONS



GRGB controller, location



GRGB controller, Connections



**Connections description**

The view of the rear side of the graphic panel highlights the connections between the LED modules, the LED driver and the GRGB controller.

The GRGB controller is fixed behind the graphic panel on the first LED module and is connected to it through a flat cable code: CAV 000751 for digital signal and the power cable code: CAV 000265 which is connected to the VLED and GND screw terminal blocks, while the Synchronization cable (See wiring specification table) must be connected to the controller of price LED displays type: PCB2 or HDP BASE. The assembly and wiring of the various elements is carried out by the factory.

The ALI 000208 LED driver is supplied separately and is equipped with a meter of cable with eyelet termination to be connected to the screw terminal blocks present in the LED modules.

**PC programming with LED PROG software**

PC programming allows total control of the functions of the graphic panel: creation of messages and programs, text pages, graphic pages, page presentation effects such as scrolling with variable speed, curtain, fading, persistence and disappearance times, etc.

To modify the graphics of the character set, for example by creating point stitch characters in Cyrillic, Arabic or others. The connection to the PC requires the addition of an RS422 / USB converter unit model CONV\_SU01 and the category 5 LAN cable.

The LED PROG programming software is available free of charge by request when buy the LED panel.

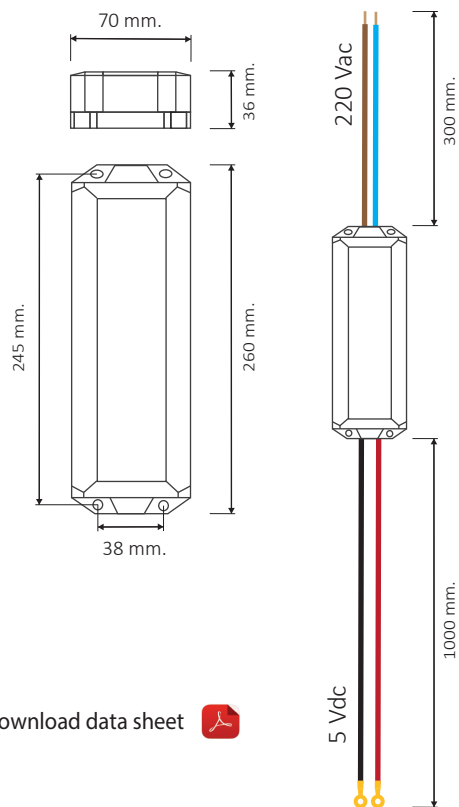
# Multi Color LED graphic panel HGM7-48x16-P10 i K

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LED DRIVER AND WIRING SPECIFICATIONS

LED driver specification

|                                  |   |
|----------------------------------|---|
| Model                            | HA200-5                                   |
| Code                             | ALI 000208                                |
| Disposability                    | NOT INCLUDED                              |
| INPUT voltage range              | 175 - 264 Vac                             |
| OUTPUT voltage                   | 5 VDC                                     |
| Power                            | 200 W                                     |
| PFC @230Vac 80% load             | ≥0.91                                     |
| Surge immunity                   | L-N 4KV L/N-GE6kV                         |
| Overload Protection (OLP)        | 110-120% nominal power                    |
| Overtemperature protection (OTP) | 115° C; automatic reset                   |
| Other protections                | Short circuit, Overvoltage                |
| Protection class                 | IP66/IP67                                 |
| CE                               | RMC - EN 55032/22 Class A, LDV - EN 60950 |
| Operating temperature            | -30° + 55° C (70°C load 50%)              |
| Dimension                        | 260*70*36mm (LWH)                         |
| Input cable                      | 400 mm ; pre-tinned wire termination      |
| Output cable                     | 1000 mm ; eyelet termination              |



Download data sheet 

**⚠ WARNING !!!**

- The two red and black (1000 mm.) output wires MUST never be extended.
- Connection to the line must be carried out by qualified personnel, in compliance with current regulations.

Wiring specification

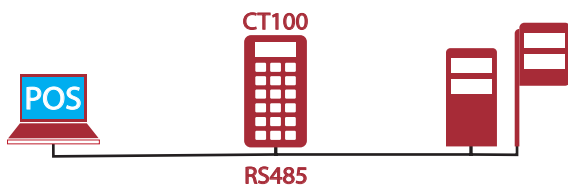
| Code            | Lenght   | Disposability | Description   |
|-----------------|----------|---------------|---|
| Cod. CAV 000751 | 180 mm.  | INCLUDED      | 20-pin flat cable for digital signal, connection of the graphic display to the GRGB controller. |
| Cod. CAV 000265 | 180 mm.  | INCLUDED      | Red-black wires for power, connection controller to LED driver, VLED GND                        |
| Cod. CAV 000737 | 40 mm.   | INCLUDED      | 20-pin flat cable for digital signal, connection between LED modules                            |
| Cod. CAV 000220 | 520 mm.  | INCLUDED      | Red-black wires for power, connection between 3 LED modules, VLED GND                           |
| Cod. CAV 000622 | 4200 mm. | NOT INCLUDED  | Data cable for synchronization with PCB2 or HDP BASE price LED display controllers              |
| Cod. CAV 000738 | 1000 mm. | NOT INCLUDED  | Data cable for synchronization with PCB2 or HDP BASE price LED display controllers              |
| Cod. CAV 000360 | 1500 mm. | NOT INCLUDED  | Data cable for synchronization with PCB2 or HDP BASE price LED display controllers              |

PROGRAMMING



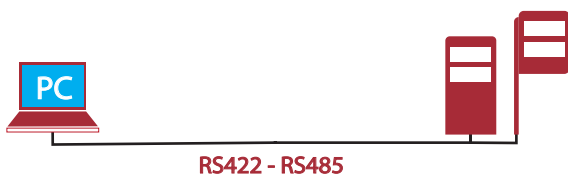
**RDC**

18-key remote control, radio frequency, range 10-50 m.  
functions: Recall of the text messages and graphic messages stored in the memory.  
OPERATION ONLY IN COMBINATION WITH PCB2 OR HDP BASE



**CT100**

LCD Keypad with 18 keys, communication through RS485 serial port, functions: Recall of the text messages and graphic messages stored in the memory.  
OPERATION ONLY IN COMBINATION WITH PCB2 OR HDP BASE



**PC, cable**

PC management, communication through RS422, RS485 serial port. Function: Programming of text messages and graphic messages, use of the LED PROG programming software.



**POS, cable**

POS management, communication through RS422, RS485 serial port. Function: Programming of text messages and graphic messages (Only with communication protocols that provide for it)  
OPERATION ONLY IN COMBINATION WITH PCB2 OR HDP BASE



**PC, wireless**

PC management through wireless radio modem. Function: Programming of text messages and graphic messages, connection to the PC, use of the LED PROG programming software.



**POS, wireless**

Control unit with management of all communication protocols, wireless range 10-50m.  
Function: Recall of the graphics and messages stored in the memory. (Only with communication protocols that provide for it)  
OPERATION IN COMBINATION WITH PCB2 OR HDP BASE

Data sheet

ACCESSORIES



RDC



CT100



CONV\_SU01



TCPIP



WT868



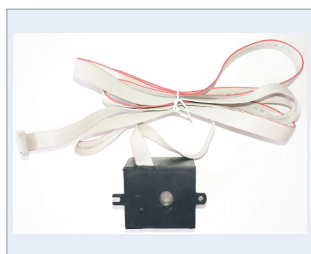
WR868



CUPW868



YAGI868



SLUX01

| Code         | Model     | Description               | Functions  |
|--------------|-----------|---------------------------|--|
| D 100 001032 | RDC       | Remote control            | Recalls stored messages and displays them on the screen                  |
| D 100 002322 | CT100     | LCD keypad                | Recalls stored messages and displays them on the screen                  |
| O 100 003023 | TCPIP     | RS485/USB - LAN Converter | Signal converter, from USB or RS485 to LAN (local network)               |
| D 100 002271 | WT868     | Tx Radio modem            | Radio frequency signal transmitter, it works with LED PROG software      |
| D 100 002272 | WR868     | Rx Radio modem            | Radio frequency signal receiver, it works with LED PROG software         |
| D 100 002164 | CUPW868   | Wireless control unit     | Radio frequency signal receiver-transmitter, all protocols are available |
| D 100 002285 | YAGI868   | Antenna Yagi              | Antenna to increase the range of: WT868, WR868, CUP868                   |
| D 100 002200 | CONV_SU01 | USB - RS422 converter     | Signal converter, from USB to RS422                                      |
| O 091 000404 | SLUX01    | Brightness sensor         | Brightness sensor must be added in case of autonomous operation          |