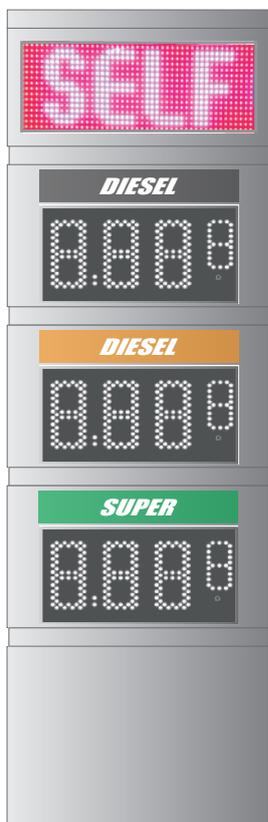


## COMPOSITION OF A MINI TOTEM



### Description

HDP COMPACT is a complete LED system for displaying fuel prices, service messaging and illumination of fuel indicators. Its compactness and reduced thickness make it suitable for integration into single- and double-sided mini totems cabinet. The range of price displays available includes the following sizes: 10 cm., 12 cm., and 15 cm character height, LED bars with optics for backlighting the product indicator and the graphic panel for service messaging. The very simple and intuitive wiring allows for quick and safe installation.

All system management is performed by a single control board PG BASE whose functions are:

- Multicolor Graphical LED panel control.
- Control of the various price LED displays ( maximum 4 displays per side ).
- Control of the LED bars for the backlighting of the product indicators
- Communication with the petrol station PC (with all available communication protocols) and the remote control.
- Automatic and synchronized brightness adjustment for all system displays.

#### Graphic LED panel 7 colors, available models:

- 1) HGM7-32X16-P10 i
- 2) HGM7-32X16-P10 i



#### Price LED display, available models:

- 1) HDP10-2S
- 2) HDP10P-2S
- 3) HDP12-2S
- 4) HDP12P-2S
- 5) HDP15-2S
- 6) HDP15P-2S

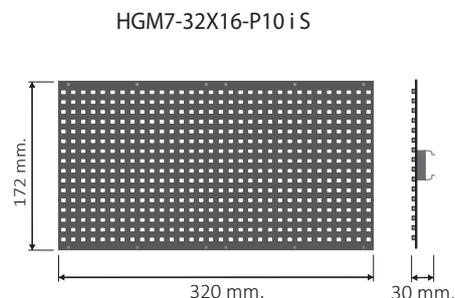
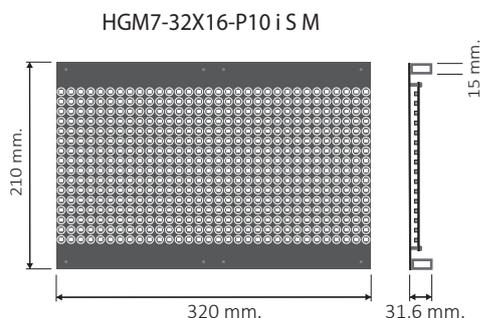


#### LED bars for backlighting

- 1) HB30A-4W15



### GRAPHIC LED PANEL 7 COLORS - 32X16 PIXEL



#### Technical Features

|                                       |                   |                      |
|---------------------------------------|-------------------|----------------------|
| Model with front mask                 | cod. G 100 000341 | HGM7-32X16-P10 i S M |
| Model without front mask              | cod. G 100 000321 | HGM7-32X16-P10 i S   |
| Operating voltage                     | DC 5V             |                      |
| Power consumption ( when all white )  | 66 W              |                      |
| Graphic resolution                    | 32 x 16 pixel     |                      |
| LED pitch                             | 10 mm.            |                      |
| LED per pixel                         | 1                 |                      |
| LED type                              | RGB               |                      |
| Screen dimension ( S M model )        | 320 x 210 mm.     |                      |
| Dimensione schermo ( S model )        | 320 x 172 mm.     |                      |
| Colors                                | 7                 |                      |
| Characters per page                   | 10                |                      |
| Available messages number             | 99                |                      |
| GIF animations                        | Si                |                      |
| LED quantity                          | 512               |                      |
| Viewing angle                         | 120°              |                      |
| Operating temperature range           | 40 C° ~ +70 C°    |                      |
| Storage temperature range             | +5 C° ~ +40 C°    |                      |
| Storage humidity range                | RH < 60%          |                      |
| Life Time ( temperature Tc = 75 °C )  | 100.000h ( L70 )  |                      |
| Power supply 230V - 5VDC              | NOT INCLUDED      |                      |
| Control board PG BASE                 | NOT INCLUDED      |                      |
| Warranty ( See terms and conditions ) | 3 Years           |                      |

#### Description

LED graphic panel 7 colors is suitable for service messaging. The panel is available in two versions: "SM" with front mask wich the LED modules are mounted on rectangular aluminum brackets; "S" without front mask with LED modules supplied loose.

Suitable for installation in the mini totem cabinet of the petrol station, functioning in combination with the HDP-S2 series LED fuel price displays described in this technical specification, the brightness is synchronized with that of the LED fuel price displays, in case of autonomous operation, the sensor must be added brightness, model: SLUX01.

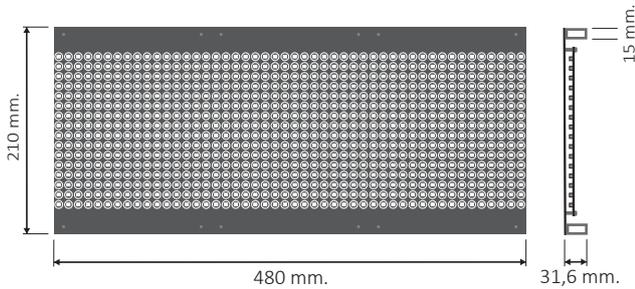
Graphic or text messages can be displayed in many modes as: static, scrolling, curtain appearance, insert from top or bottom, fade, random appearance and others...

The main messages such as: SELF, SERV, CLOSED, OPEN, STATIC or ANIMATED ARROWS RIGHT, LEFT or BOTH are already stored in the memory of the control board. Upon request, it is possible to customize and insert any additional messages with ad hoc texts and graphics within the limit allowed by the graphic resolution of the panel, this service is evaluated separately. The messages can be recalled with the remote control of LED fuel price display RDC, or through the connection to the PC of petrol station (when the LED graphic panel 7 colors is connected to the HDP control board), or use a PC with ledprog software with which it is possible to create text programs and graphs independently.

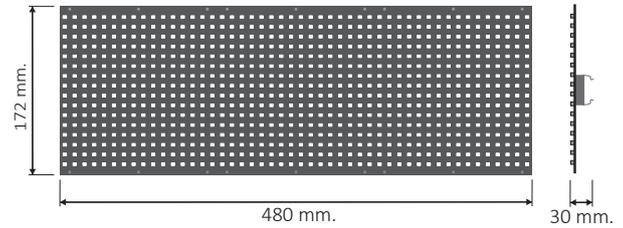


### GRAPHIC LED PANEL 7 COLORS - 48X16 PIXEL

HGM7-48X16-P10 i S M



HGM7-32X16-P10 i S



#### Technical Features

|                                       |   |                      |
|---------------------------------------|---|----------------------|
| Model with front mask                 | cod. G 100 000343   | HGM7-48X16-P10 i S M |
| Model without front mask              | cod. G 100 000342   | HGM7-48X16-P10 i S   |
| Operating voltage                     | DC 5 V  |                      |
| Power consumption ( when all white )  | 100 W   |                      |
| Graphic resolution                    | 48 x 16 pixel   |                      |
| LED pitch                             | 10 mm.  |                      |
| LED per pixel                         | 1   |                      |
| LED type                              | RGB   |                      |
| Screen dimension ( S M model )        | 480 x 210 mm.   |                      |
| Dimensione schermo ( S model )        | 480 x 172 mm.   |                      |
| Colors                                | 7   |                      |
| Characters per page                   | 16  |                      |
| Available messages number             | 99  |                      |
| GIF animations                        | Si  |                      |
| LED quantity                          | 768   |                      |
| Viewing angle                         | 120°  |                      |
| Operating temperature range           | 40 C° ~ +70 C°  |                      |
| Storage temperature range             | +5 C° ~ +40 C°  |                      |
| Storage humidity range                | RH < 60%  |                      |
| Life Time (temperature Tc = 75 °C)    | 100.000h ( L70)   |                      |
| Power supply 230V - 5VDC              | NOT INCLUDED  |                      |
| Control board PG BASE                 | NOT INCLUDED  |                      |
| Warranty ( See terms and conditions ) |  3 Years |                      |

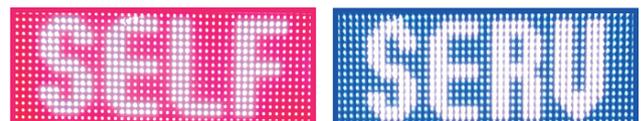
#### Description

LED graphic panel 7 colors is suitable for service messaging. The panel is available in two versions: "SM" with front mask wich the LED modules are mounted on rectangular aluminum brackets; "S" without front mask with LED modules supplied loose.

Suitable for installation in the mini totem cabinet of the petrol station, functioning in combination with the HDP-S2 series LED fuel price displays described in this technical specification, the brightness is synchronized with that of the LED fuel price displays, in case of autonomous operation, the sensor must be added brightness, model: SLUX01.

Graphic or text messages can be displayed in many modes as: static, scrolling, curtain appearance, insert from top or bottom, fade, random appearance and others...

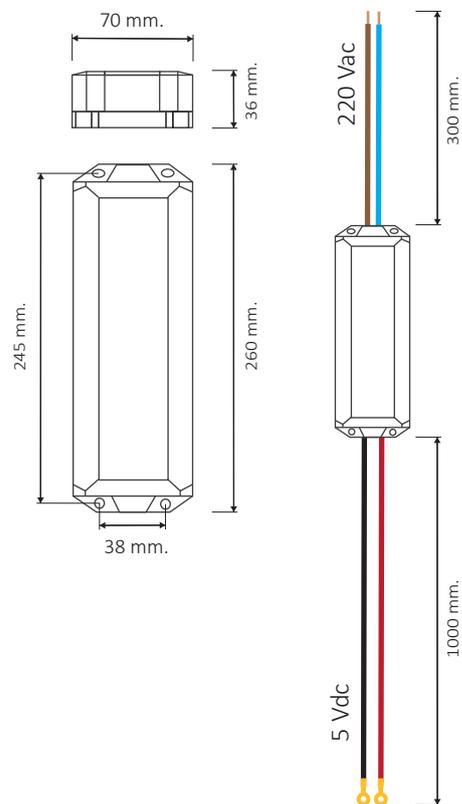
The main messages such as: SELF, SERV, CLOSED, OPEN, STATIC or ANIMATED ARROWS RIGHT, LEFT or BOTH are already stored in the memory of the control board. Upon request, it is possible to customize and insert any additional messages with ad hoc texts and graphics within the limit allowed by the graphic resolution of the panel, this service is evaluated separately. The messages can be recalled with the remote control of LED fuel price display RDC, or through the connection to the PC of petrol station (when the LED graphic panel 7 colors is connected to the HDP control board), or use a PC with ledprog software with which it is possible to create text programs and graphs independently.



### POWER SUPPLY FOR GRAPHIC PANEL 7 COLORS

#### Technical features

|                                  |   |
|----------------------------------|---|
| Model                            | HA200-5                                   |
| Code                             | ALI 000208                                |
| Availability                     | NT INCLUDED                               |
| INPUT Voltage :                  | 175 - 264 Vac                             |
| OUTPUT Voltage                   | 5 VDC                                     |
| Power                            | 200 W                                     |
| PFC @230Vac 80% load             | ≥0.91                                     |
| Immunity ( Surge )               | L-N 4KV L/N-GE6kV                         |
| Overload protection (OLP)        | 110-120% nominal power                    |
| Overtemperature protection (OTP) | 115° C; automatic restoration             |
| Other protections                | Short circuit, Overvoltage                |
| IP level                         | IP66/IP67                                 |
| CE                               | RMC - EN 55032/22 Class A, LDV - EN 60950 |
| Operating temperature range      | -30° + 55° C (70°C load 50%)              |
| Dimension                        | 260*70*36mm (LWH)                         |
| Input cord                       | 400 mm ; Pre-tinned wire termination      |
| Output wires                     | 1000 mm ; Ring termination                |



#### ⚠ WARNING !!!

- The two red and black 5 Vdc output wires ( 1000 mm. ) must absolutely not be lengthened..
- The connection to the power line must be performed by qualified personnel and must be carried out in compliance with current regulations.

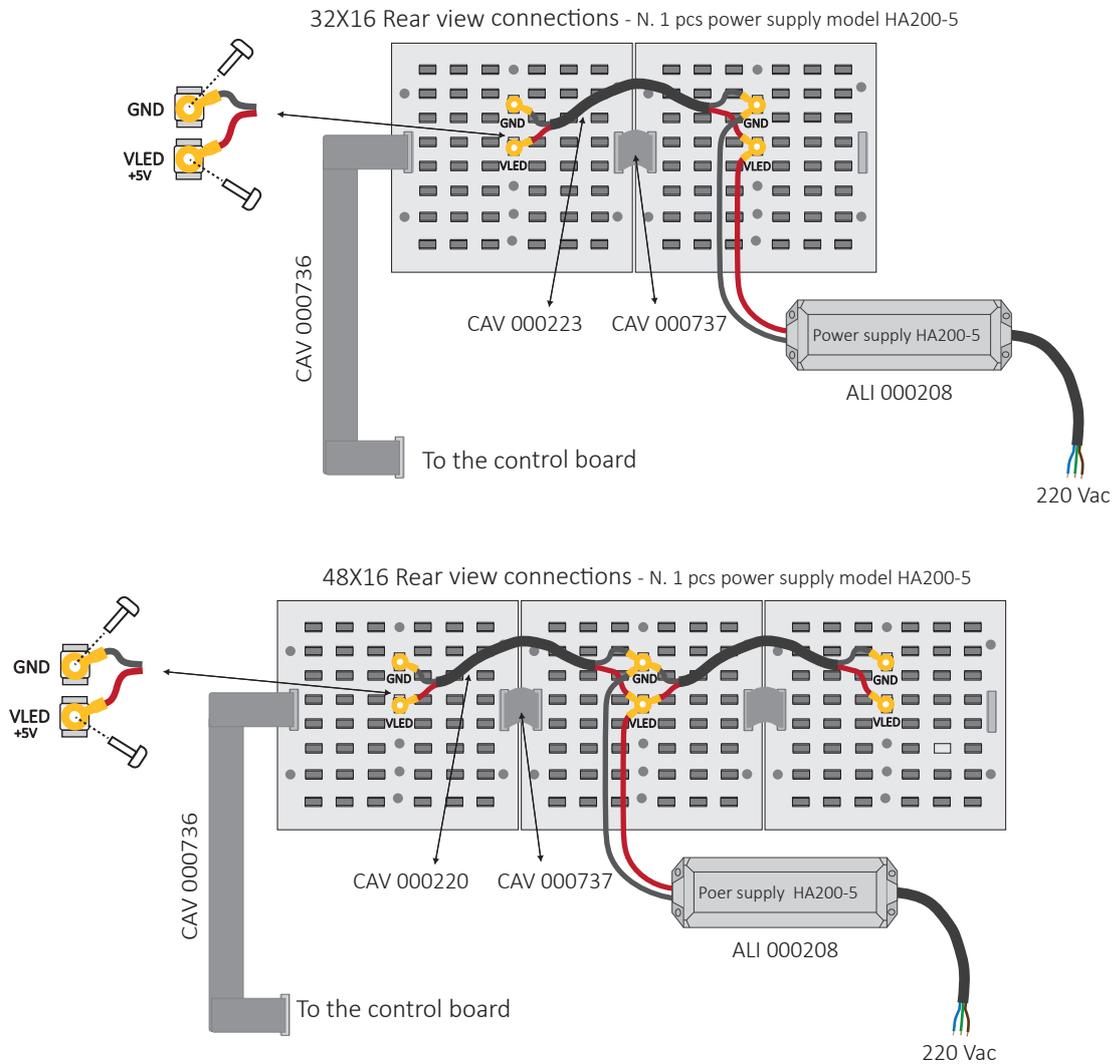
#### Cables specification

| Code            | Lenght  | Availability | Description  |
|-----------------|---------|--------------|--|
| Cod. CAV 000736 | 550 mm. | INCLUDED     | 20-pin flat cable for digital signal, connection of graphic display to control board.    |
| Cod. CAV 000737 | 40 mm.  | INCLUDED     | 20-pole flat cable for digital signal, connection between LED modules                    |
| Cod. CAV 000223 | 260 mm. | INCLUDED     | Wiring with red-black wires for powering 2 LED modules, VLED GND                         |
| Cod. CAV 000220 | 520 mm. | INCLUDED     | Wiring with red-black wires for powering 3 LED modules, VLED GND                         |
| Cod. CAV 000254 | 360 mm. | NOT INCLUDED | Price display connection cable to PG BASE ( please choose the ideal size - short type )  |
| Cod. CAV 000269 | 500 mm. | NOT INCLUDED | Price display connection cable to PG BASE ( please choose the ideal size - medium type ) |
| Cod. CAV 000266 | 700 mm. | NOT INCLUDED | Price display connection cable to PG BASE ( pleasechoose the ideal size - long type )    |

#### ⚠ WARNING !!!

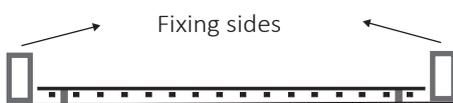
- The connection cables of the price display with the PG BASE control board must be chosen from the 3 available sizes, see the above table.

## WIRING AND FIXING OF THE LED PANEL 7 COLORS



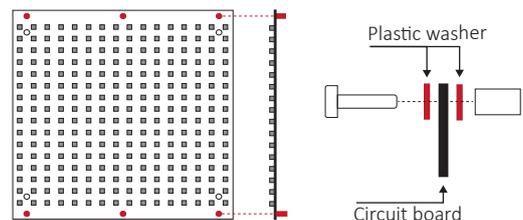
### ⚠ WARNING- FIXING MODEL: SM

The LED panel can be fixed to a structure by mounting angle pieces with self-drilling screws on the fixing points indicated, avoiding drilling or mechanically stressing the electronic board. Remove any metal shavings before powering up the display.

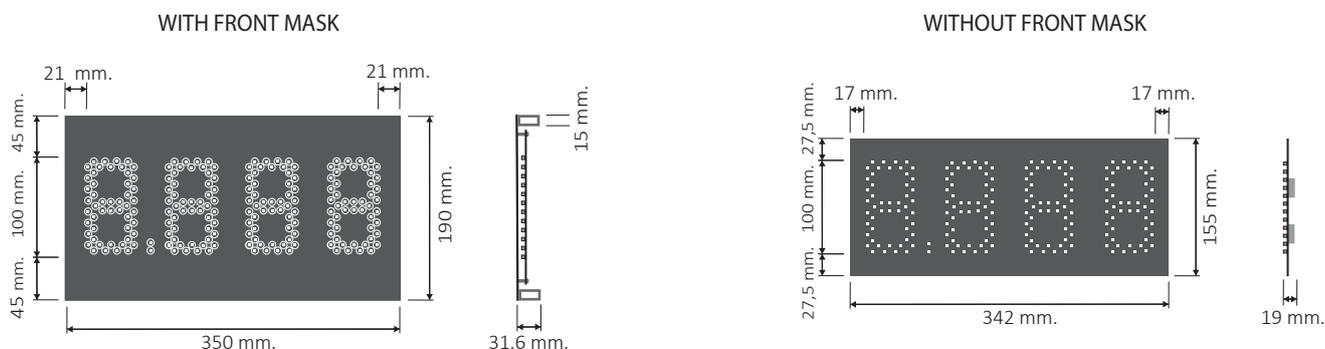


### ⚠ WARNING- FIXING MODEL: S

Use the holes marked in red for fixing, keep a gap between the module and metal bracket using plastic spacers 5/10 mm. If using metal spacers insert plastic washers on both sides of the circuit board.



### LED FUEL PRICE DISPLAY MODEL: HDP10-2S



| Model             | Code         | Details                        |
|-------------------|--------------|--------------------------------|
| HDP10-2S-A-WSMD-4 | D 100 002470 | With front mask - White LED    |
| HDP10-2S-A-RSMD-4 | D 100 002471 | With front mask - Red LED      |
| HDP10-2S-A-ASMD-4 | D 100 002472 | With front mask - Amber LED    |
| HDP10-2S-A-GSMD-4 | D 100 002473 | With front mask - Green LED    |
| HDP10-2S-B-WSMD-4 | D 100 002474 | Without front mask - White LED |
| HDP10-2S-B-RSMD-4 | D 100 002475 | Without front mask - Red LED   |
| HDP10-2S-B-ASMD-4 | D 100 002476 | Without front mask - Amber LED |
| HDP10-2S-B-GSMD-4 | D 100 002477 | Without front mask - Green LED |

### Technical Features

|                                       |   |
|---------------------------------------|---|
| Operating voltage                     | DC 15 V   |
| Consumption                           | 12,2 W  |
| IP level                              | IP52  |
| Operating temperature range           | 40 C° ~ +70 C°  |
| Storage temperature range             | +5 C° ~ +40 C°  |
| Storage humidity range                | RH < 60%  |
| Over-temperature protection threshold | +75 C°  |
| Viewing angle                         | 120°  |
| LED quantity                          | 202   |
| Life time (temperature Tc = 75 °C)    | 100.000h ( L70)   |
| Warranty ( See terms and conditions ) |  3 Years |

### Description

LED fuel price display with 4 digits, height 100 mm. SMD LEDs suitable for continuous operation 24h/day with exposure to UV sunlight. The boards are coated with a special silicone resin, whose formula keeps it elastic over time, avoiding cracking and infiltrations. A heat-insulating sun front mask is placed to protect the LEDs and electronic components.

### Technical characteristics of LED

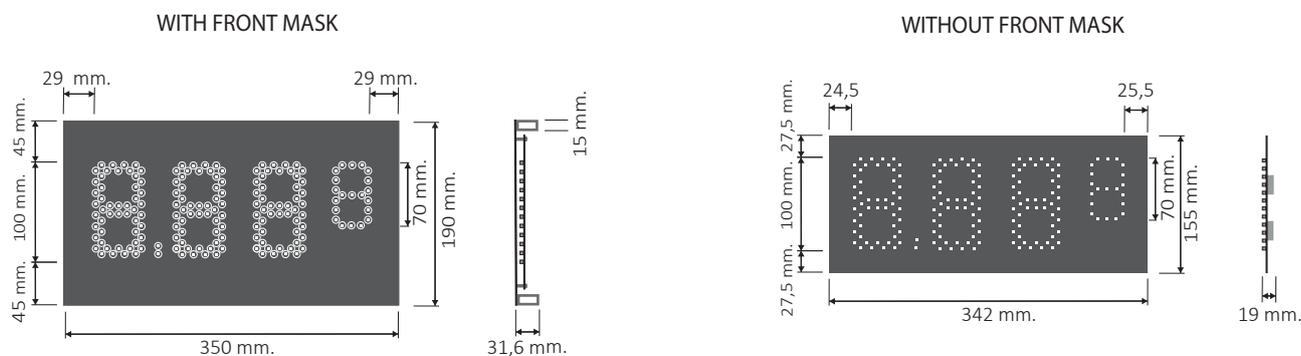
| Color       | Luminosity |
|-------------|------------|
| White 6500k | 3200 MCD   |
| Amber       | 2270 MCD   |
| Red         | 1000 MCD   |
| Green       | 1200 MCD   |

### NOTE:

The version without front mask is recommended only for applications where the front mask consists of perforated film applied to the protection plexiglass or a panel perforated by the customer, to get the drilling files corresponding to the LEDs, please contact our technical office.



### LED FUEL PRICE DISPLAY MODEL: HDP10P-2S



| Model              | Code         | Details                        |
|--------------------|--------------|--------------------------------|
| HDP10P-2S-A-WSMD-4 | D 100 002478 | With front mask - White LED    |
| HDP10P-2S-A-RSMD-4 | D 100 002479 | With front mask - Red LED      |
| HDP10P-2S-A-ASMD-4 | D 100 002480 | With front mask - Amber LED    |
| HDP10P-2S-A-GSMD-4 | D 100 002481 | With front mask - Green LED    |
| HDP10P-2S-B-WSMD-4 | D 100 002482 | Without front mask - White LED |
| HDP10P-2S-B-RSMD-4 | D 100 002483 | Without front mask - Red LED   |
| HDP10P-2S-B-ASMD-4 | D 100 002484 | Without front mask - Amber LED |
| HDP10P-2S-B-GSMD-4 | D 100 002485 | Without front mask - Green LED |

#### Technical Features

|                                       |   |
|---------------------------------------|---|
| Operating voltage                     | DC 15 V   |
| Consumption                           | 10,8 W  |
| IP level                              | IP52  |
| Operating temperature range           | 40 C° ~ +70 C°  |
| Storage temperature range             | +5 C° ~ +40 C°  |
| Storage humidity range                | RH < 60%  |
| Over-temperature protection threshold | +75 C°  |
| Viewing angle                         | 120°  |
| LED quantity                          | 173   |
| Life time (temperature Tc = 75 °C)    | 100.000h ( L70)   |
| Warranty ( See terms and conditions ) |  3 Years |

#### Description

LED fuel price display with 3 digits, height 100 mm. and the rightmost digit height 70 mm.

SMD LEDs suitable for continuous operation 24h/day with exposure to UV sunlight. The boards are coated with a special silicone resin, whose formula keeps it elastic over time, avoiding cracking and infiltrations. A heat-insulating sun front mask is placed to protect the LEDs and electronic components.

#### Technical characteristics of LED

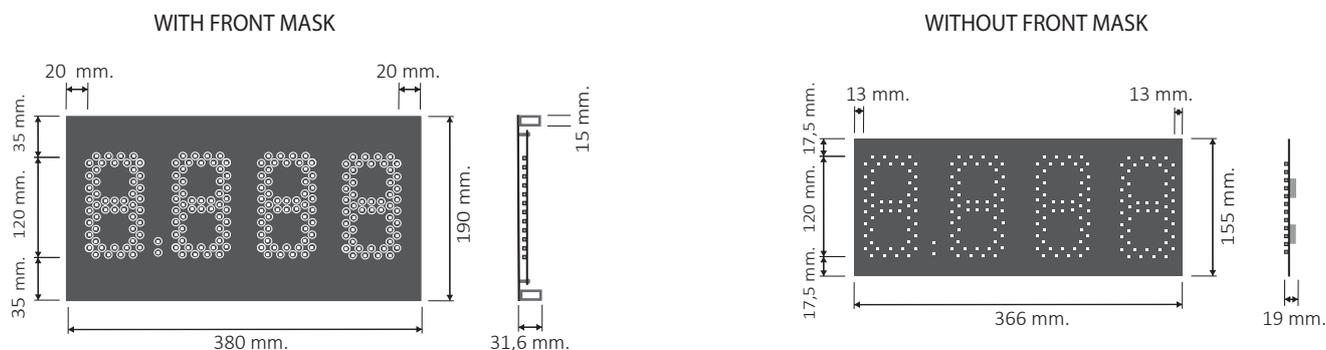
| Color       | Luminosity |
|-------------|------------|
| White 6500k | 3200 MCD   |
| Amber       | 2270 MCD   |
| Red         | 1000 MCD   |
| Green       | 1200 MCD   |

#### NOTE:

The version without front mask is recommended only for applications where the front mask consists of perforated film applied to the protection plexiglass or a panel perforated by the customer, to get the drilling files corresponding to the LEDs, please contact our technical office.



### LED FUEL PRICE DISPLAY MODEL: HDP12-2S



| Model             | Code         | Details                        |
|-------------------|--------------|--------------------------------|
| HDP12-2S-A-WSMD-4 | D 100 002486 | With front mask - White LED    |
| HDP12-2S-A-RSMD-4 | D 100 002487 | With front mask - Red LED      |
| HDP12-2S-A-ASMD-4 | D 100 002488 | With front mask - Amber LED    |
| HDP12-2S-A-GSMD-4 | D 100 002489 | With front mask - Green LED    |
| HDP12-2S-B-WSMD-4 | D 100 002490 | Without front mask - White LED |
| HDP12-2S-B-RSMD-4 | D 100 002491 | Without front mask - Red LED   |
| HDP12-2S-B-ASMD-4 | D 100 002492 | Without front mask - Amber LED |
| HDP12-2S-B-GSMD-4 | D 100 002493 | Without front mask - Green LED |

### Description

LED fuel price display with 4 digits, height 120 mm. SMD LEDs suitable for continuous operation 24h/day with exposure to UV sunlight. The boards are coated with a special silicone resin, whose formula keeps it elastic over time, avoiding cracking and infiltrations. A heat-insulating sun front mask is placed to protect the LEDs and electronic components.

### Technical characteristics of LED

| Color       | Luminosity |
|-------------|------------|
| White 6500k | 3200 MCD   |
| Amber       | 2270 MCD   |
| Red         | 1000 MCD   |
| Green       | 1200 MCD   |

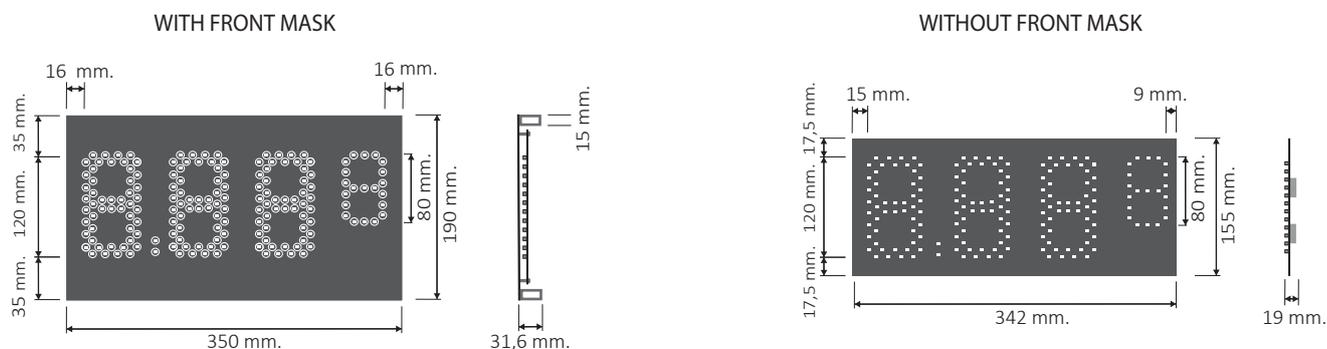
### NOTE:

The version without front mask is recommended only for applications where the front mask consists of perforated film applied to the protection plexiglass or a panel perforated by the customer, to get the drilling files corresponding to the LEDs, please contact our technical office.

|                                      |   |
|--------------------------------------|---|
|                                      | DC 15 V   |
|                                      | 12,2 W  |
|                                      | IP52  |
| Garanzia (Vedi termini e condizioni) | 40 C° ~ +70 C°  |
|                                      | +5 C° ~ +40 C°  |
|                                      | RH < 60%  |
|                                      | +75 C°  |
|                                      | 120°  |
| Garanzia (Vedi termini e condizioni) | 202   |
|                                      | 100.000h (L70)  |
|                                      |  3 Years |



### LED FUEL PRICE DISPLAY MODEL: HDP12P-2S



| Model              | Code         | Details                        |
|--------------------|--------------|--------------------------------|
| HDP12P-2S-A-WSMD-4 | D 100 002494 | With front mask - White LED    |
| HDP12P-2S-A-RSMD-4 | D 100 002495 | With front mask - Red LED      |
| HDP12P-2S-A-ASMD-4 | D 100 002496 | With front mask - Amber LED    |
| HDP12P-2S-A-GSMD-4 | D 100 002497 | With front mask - Green LED    |
| HDP12P-2S-B-WSMD-4 | D 100 002387 | Without front mask - White LED |
| HDP12P-2S-B-RSMD-4 | D 100 002498 | Without front mask - Red LED   |
| HDP12P-2S-B-ASMD-4 | D 100 002499 | Without front mask - Amber LED |
| HDP12P-2S-B-GSMD-4 | D 100 002500 | Without front mask - Green LED |

#### Technical Features

|                                       |   |
|---------------------------------------|---|
| Operating voltage                     | DC 15 V   |
| Consumption                           | 10,8 W  |
| IP level                              | IP52  |
| Operating temperature range           | 40 C° ~ +70 C°  |
| Storage temperature range             | +5 C° ~ +40 C°  |
| Storage humidity range                | RH < 60%  |
| Over-temperature protection threshold | +75 C°  |
| Viewing angle                         | 120°  |
| LED quantity                          | 173   |
| Life time (temperature Tc = 75 °C)    | 100.000h ( L70)   |
| Warranty ( See terms and conditions ) |  3 Years |

#### Description

LED fuel price display with 3 digits, height 120 mm. and the rightmost digit height 80 mm.

SMD LEDs suitable for continuous operation 24h/day with exposure to UV sunlight. The boards are coated with a special silicone resin, whose formula keeps it elastic over time, avoiding cracking and infiltrations. A heat-insulating sun front mask is placed to protect the LEDs and electronic components.

#### Technical characteristics of LED

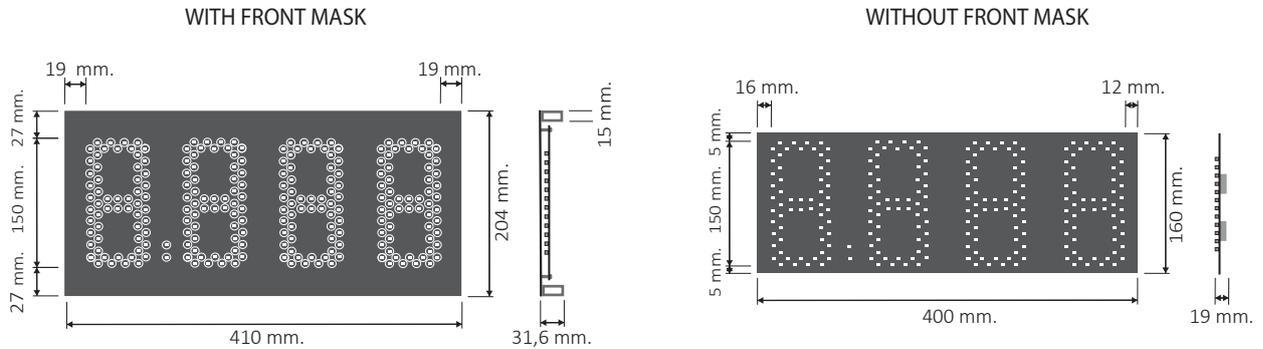
| Color       | Luminosity |
|-------------|------------|
| White 6500k | 3200 MCD   |
| Amber       | 2270 MCD   |
| Red         | 1000 MCD   |
| Green       | 1200 MCD   |

#### NOTE:

The version without front mask is recommended only for applications where the front mask consists of perforated film applied to the protection plexiglass or a panel perforated by the customer, to get the drilling files corresponding to the LEDs, please contact our technical office.



### LED FUEL PRICE DISPLAY MODEL: HDP15-2S



| Model             | Code         | Details                        |
|-------------------|--------------|--------------------------------|
| HDP15-2S-A-WSMD-4 | D 100 002501 | With front mask - White LED    |
| HDP15-2S-A-RSMD-4 | D 100 002502 | With front mask - Red LED      |
| HDP15-2S-A-ASMD-4 | D 100 002503 | With front mask - Amber LED    |
| HDP15-2S-A-GSMD-4 | D 100 002504 | With front mask - Green LED    |
| HDP15-2S-B-WSMD-4 | D 100 002505 | Without front mask - White LED |
| HDP15-2S-B-RSMD-4 | D 100 002506 | Without front mask - Red LED   |
| HDP15-2S-B-ASMD-4 | D 100 002507 | Without front mask - Amber LED |
| HDP15-2S-B-GSMD-4 | D 100 002508 | Without front mask - Green LED |

### Technical Features

|                                       |   |
|---------------------------------------|---|
| Operating voltage                     | DC 15 V   |
| Consumption                           | 16 W  |
| IP level                              | IP52  |
| Operating temperature range           | 40 C° ~ +70 C°  |
| Storage temperature range             | +5 C° ~ +40 C°  |
| Storage humidity range                | RH < 60%  |
| Over-temperature protection threshold | +75 C°  |
| Viewing angle                         | 120°  |
| LED quantity                          | 234   |
| Life time (temperature Tc = 75 °C)    | 100.000h (L70)  |
| Warranty ( See terms and conditions ) |  3 Years |

### Description

LED fuel price display with 4 digits, height 150 mm. SMD LEDs suitable for continuous operation 24h/day with exposure to UV sunlight. The boards are coated with a special silicone resin, whose formula keeps it elastic over time, avoiding cracking and infiltrations. A heat-insulating sun front mask is placed to protect the LEDs and electronic components.

### Technical characteristics of LED

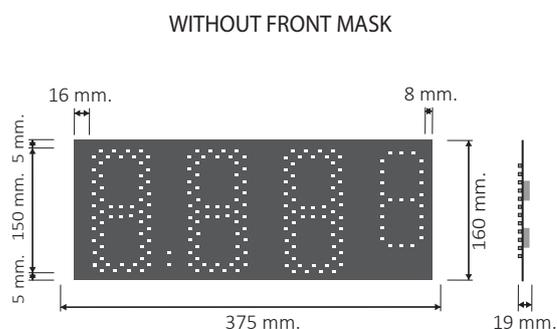
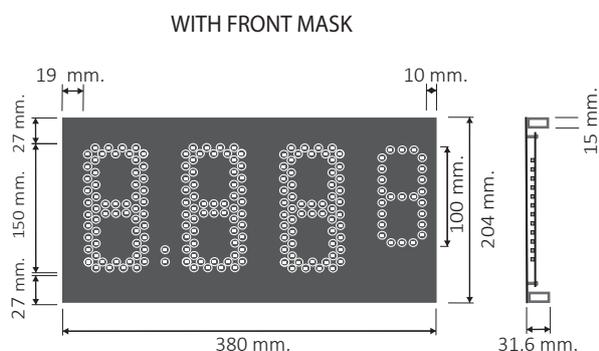
| Color       | Luminosity |
|-------------|------------|
| White 6500k | 3200 MCD   |
| Amber       | 2270 MCD   |
| Red         | 1000 MCD   |
| Green       | 1200 MCD   |

### NOTE:

The version without front mask is recommended only for applications where the front mask consists of perforated film applied to the protection plexiglass or a panel perforated by the customer, to get the drilling files corresponding to the LEDs, please contact our technical office.



### LED FUEL PRICE DISPLAY MODEL: HDP15P-2S



| Model              | Code     | Details                        |
|--------------------|----------|--------------------------------|
| HDP15P-2S-A-WSMD-4 | D 100 00 | With front mask - White LED    |
| HDP15P-2S-A-RSMD-4 | D 100 00 | With front mask - Red LED      |
| HDP15P-2S-A-ASMD-4 | D 100 00 | With front mask - Amber LED    |
| HDP15P-2S-A-GSMD-4 | D 100 00 | With front mask - Green LED    |
| HDP15P-2S-B-WSMD-4 | D 100 00 | Without front mask - White LED |
| HDP15P-2S-B-RSMD-4 | D 100 00 | Without front mask - Red LED   |
| HDP15P-2S-B-ASMD-4 | D 100 00 | Without front mask - Amber LED |
| HDP15P-2S-B-GSMD-4 | D 100 00 | Without front mask - Green LED |

#### Technical Features

|                                       |   |
|---------------------------------------|---|
| Operating voltage                     | DC 15 V   |
| Consumption                           | 15 W  |
| IP level                              | IP52  |
| Operating temperature range           | 40 C° ~ +70 C°  |
| Storage temperature range             | +5 C° ~ +40 C°  |
| Storage humidity range                | RH < 60%  |
| Over-temperature protection threshold | +75 C°  |
| Viewing angle                         | 120°  |
| LED quantity                          | 201   |
| Life time (temperature Tc = 75 °C)    | 100.000h ( L70)   |
| Warranty ( See terms and conditions ) |  3 Years |

#### Description

LED fuel price display with 3 digits, height 150 mm. and the rightmost digit height 100 mm.

SMD LEDs suitable for continuous operation 24h/day with exposure to UV sunlight. The boards are coated with a special silicone resin, whose formula keeps it elastic over time, avoiding cracking and infiltrations. A heat-insulating sun front mask is placed to protect the LEDs and electronic components.

#### Technical characteristics of LED

| Color       | Luminosity |
|-------------|------------|
| White 6500k | 3200 MCD   |
| Amber       | 2270 MCD   |
| Red         | 1000 MCD   |
| Green       | 1200 MCD   |

#### NOTE:

The version without front mask is recommended only for applications where the front mask consists of perforated film applied to the protection plexiglass or a panel perforated by the customer, to get the drilling files corresponding to the LEDs, please contact our technical office.



## POWER SUPPLIES AND CABLES FOR LED FUEL PRICE DISPLAY

The tables indicate how many and which model of power supplies are required and to which terminals of the PG BASE board they must be connected.

For example, a 2+2 system, so, 2 pcs HDP15-2S LED displays per side (double-sided), requires an HLG-150H-15 power supply which must be connected to the +V1-GND screws terminals of the PG BASE board.

| Code         | Models of available power supplies | LED fuel price display quantity  | Power supply unit |
|--------------|------------------------------------|----------------------------------|-------------------|
| D 100 001240 | LPF-60-15 Wired                    | 1+0 HDP10-2S; HDP12-2S; HDP15-2S | LPF-60-15         |
| D 100 001241 | HLG-150H-15A Wired                 | 1+1 HDP10-2S; HDP12-2S; HDP15-2S | LPF-60-15         |
| D 100 001242 | HLG-240-15 Wired                   | 2+0 HDP10-2S; HDP12-2S; HDP15-2S | LPF-60-15         |
| D 100 001243 | HLG-320-15 Wired                   | 2+2 HDP10-2S; HDP12-2S; HDP15-2S | HLG-150H-15       |
|              |                                    | 3+0 HDP10-2S; HDP12-2S; HDP15-2S | LPF-60-15         |
|              |                                    | 3+3 HDP10-2S; HDP12-2S; HDP15-2S | HLG-150H-15       |
|              |                                    | 4+0 HDP10-2S; HDP12-2S; HDP15-2S | HLG-150H-15       |
|              |                                    | 4+4 HDP10-2S; HDP12-2S ---       | HLG-150H-15       |
|              |                                    | 4+4 HDP15-2S --- ---             | HLG-240-15        |

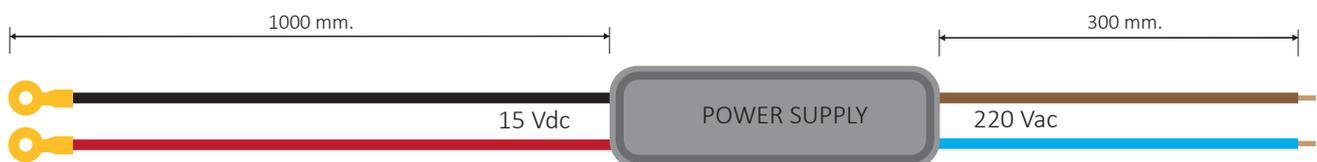
### The wiring of the power supplies

**INPUT 220 Vac** - the length of the 220 Vac input cord is 300 mm.

**OUTPUT 15 Vdc** - the length of the two black and red wires is 1000 mm. The wires have a ring termination and must be connected firmly to the terminals block on the PG BASE board respecting the polarity.

#### **⚠ WARNING !!!**

- The two red and black 15 Vdc output wires ( 1000 mm. ) must absolutely not be lengthened.
- The connection to the line must be performed by qualified personnel and must be carried out in compliance with current regulations.



### LED BAR MOD. HB30A-4W15-S



#### Description

The LED bar HB30A is suitable for the backlighting of the fuel indicators present on the mini totem of service stations, the exclusive optics with prisms allow to reduce the distance between the plexiglass surface and LEDs, minimum 30 mm while maintaining the uniform brightness over the entire surface.

The LED bar can be connected directly to the connector on the "2S" series fuel price LED displays and is automatically switched on and off by the system.

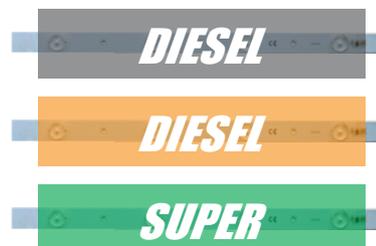
#### Benefits

- The particular prismatic optic guarantees perfect uniformity of light,
- Minimizes light loss, increasing efficiency.
- The 3M adhesive offers greater speed and safety in the installation operations, contributing to the reduction of costs.
- The production date is printed on the product for traceability.

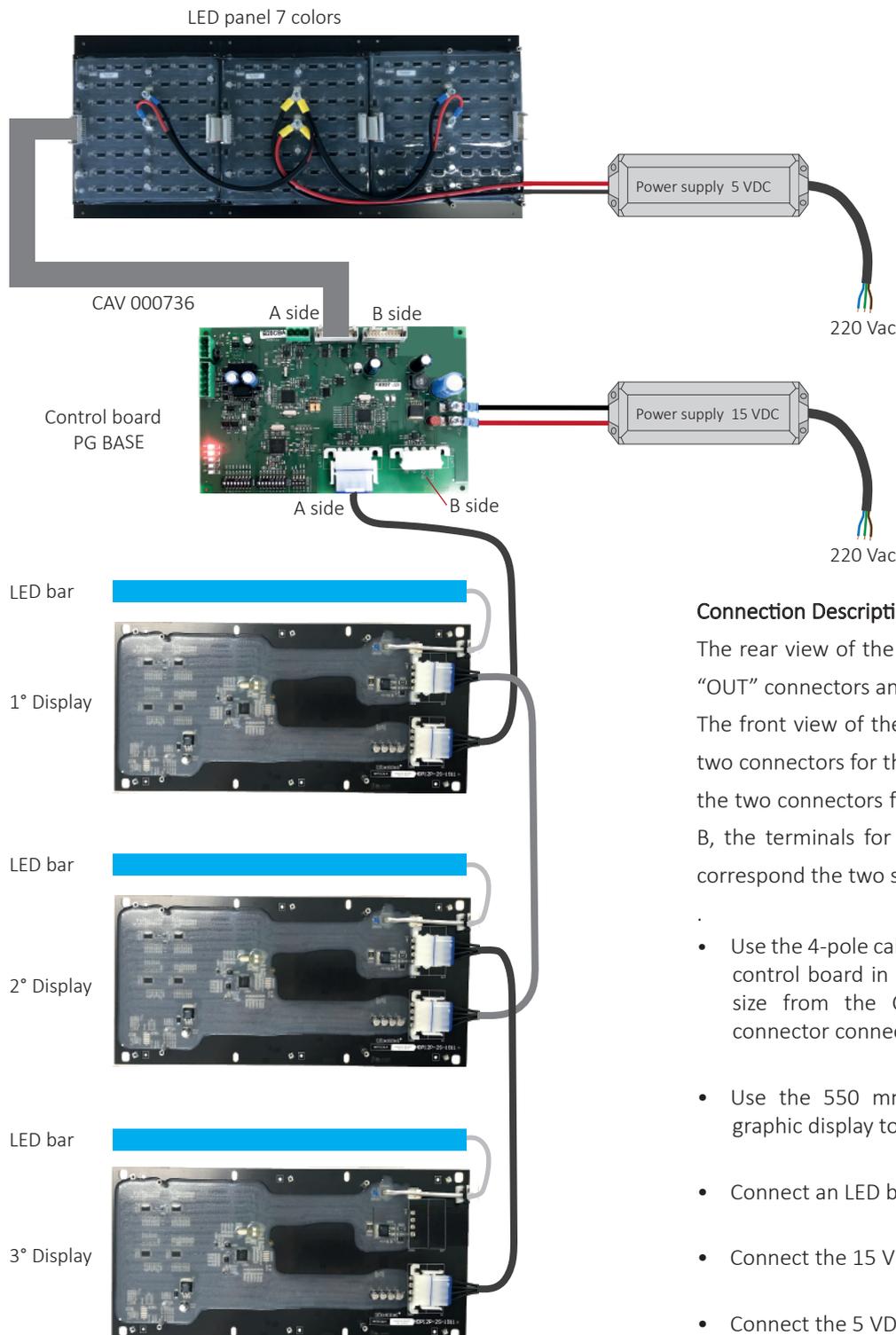
| Model        | Code       |
|--------------|------------|
| HB30A-4W15-S | HTL 000700 |

#### Technical features

|                                     |   |
|-------------------------------------|---|
| Operating voltage                   | DC 15 V   |
| Wattage                             | 3,2 W   |
| CCT                                 | 6500/7000 K   |
| Luminous flux                       | 222 Lumen   |
| IP Protection level                 | IP 52   |
| Operating temperature range         | 40 C° ~ +60 C°  |
| Storage temperature range           | +5 C° ~ +40 C°  |
| Storage humidity range              | RH < 60%  |
| Viewing angle                       | 170° Prismi   |
| Life time (temperature Tc = 75 °C)  | 100.000h ( L70)   |
| Warranty ( See term and conditions) |  3 Years |



## WIRING EXAMPLE OF A 3 PRODUCT SYSTEM



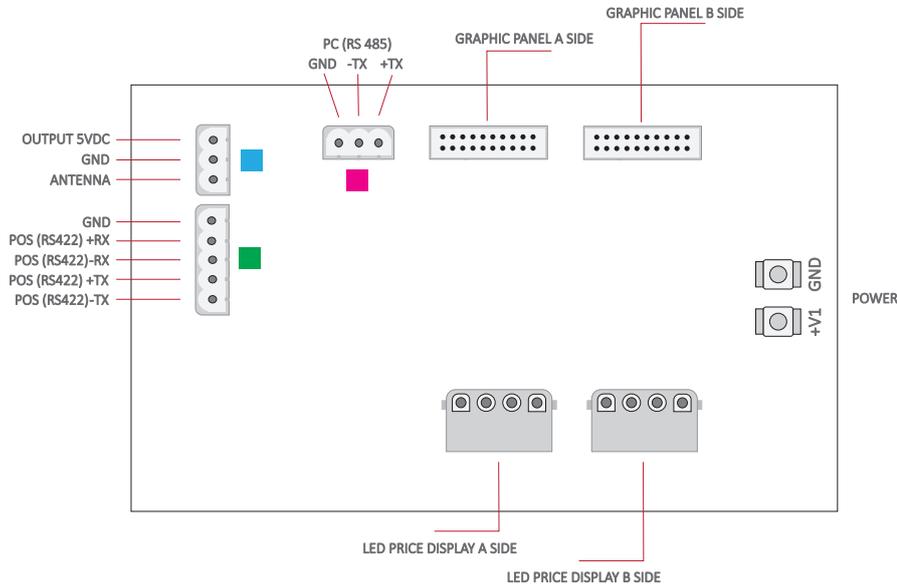
### Connection Description

The rear view of the LED price display highlights the 2 “IN” “OUT” connectors and the connector for the LED bar.

The front view of the PG BASE control board highlights the two connectors for the LED price displays, side A and side B, the two connectors for the graphic displays, side A and side B, the terminals for the power supply (side A and Side B correspond the two sides of the totem).

- Use the 4-pole cables to connect the price displays to the control board in the sequence, choose the appropriate size from the Cable specifications table. The OUT connector connects to the IN connector.
- Use the 550 mm 20-pole flat cable to connect the graphic display to the PG BASE board.
- Connect an LED bar to each price display.
- Connect the 15 VDC power supply to the PG BASE board.
- Connect the 5 VDC power supply to the graphic display.

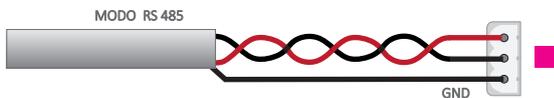
## PG BASE- CONNECTIONS



How to connect the cable in RS422 mode and RS485 mode, for communication to POS . Use LAN cable type CAT 5



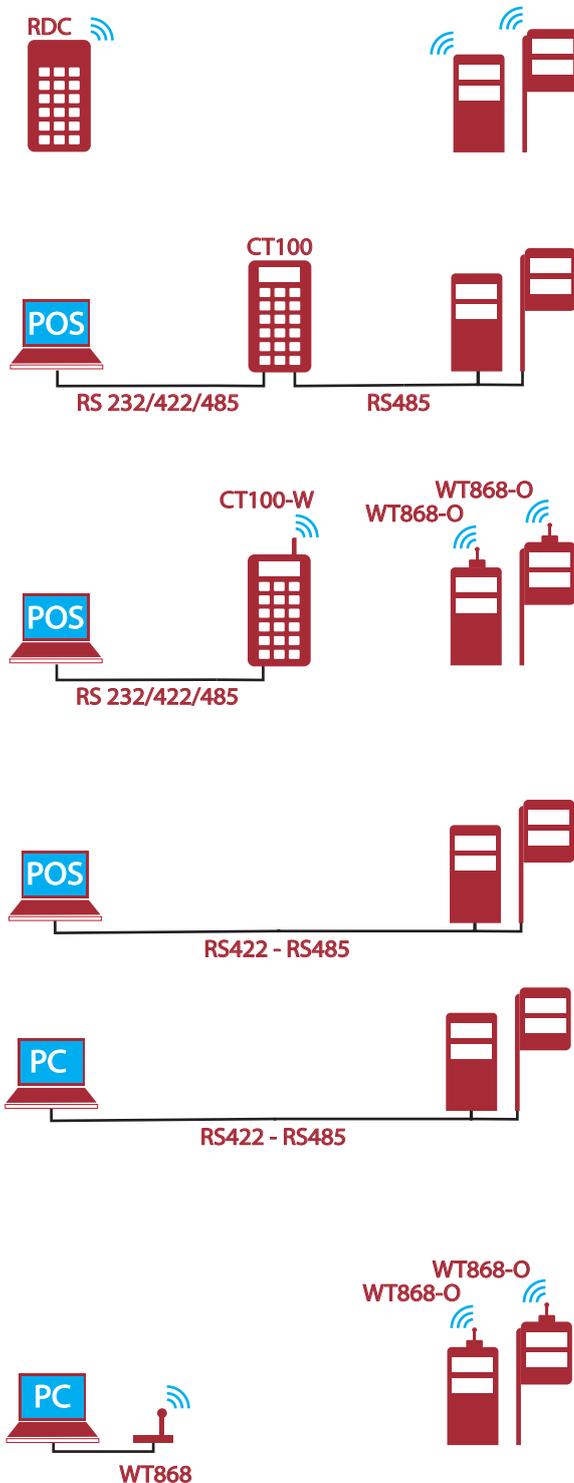
How to connect the cable RS485 serial port for communication to graphic panel



Optional- Antenna for RDC receiving signal. Add the external antenna if the PG BASE board is placed in a place shielded from metal parts.



## PROGRAMMING



### Remote RDC

Remote control for manual programming of LED displays, manage the messages from text or graphic panels (if present) and many other setting functions.

### Keyboard CT100

The CT100 LCD keypad allows you to program LED displays and manage the messages from textual or graphic panels (if present), or it can become transparent allowing programming directly from POS via communication protocols, or both modes at the same time, use a category 5 LAN cable (length maximum cable length: 1000 m).

### Keyboard CT100-W

The CT100-W LCD keypad allows you to program LED displays and manage messages from textual or graphic panels (if present), or it can become transparent allowing programming directly from POS via communication protocols, or both modes at the same time. use category 5 lan cable to connect CT100-W and POS, while between CT100-W and LED display the connection is wireless. The range is approximately 100 linear meters in open field (must be use a receiver WT 868-O for each display system).

### Wired POS or PC

Programmation of one or more LED display systems by POS/PC through connection of category 5 LAN cable (max. cable lenght: 1000m). In case of POS all communication protocols listed on the next page are available, in case of PC the software LEDPROG must be intalled , the remote control can be used at the same time. If necessary add a CONV-SU01 for RS422 serial ( optional ).

### Wireless PC

Wireless Programming of one or more LED display systems from PC using WT868 and WT868-O, the range is approximately 100 linear meters in open field. Suitable for use with LED PROG software, the remote control can be used at the same time.

## AVAILABLE COMMUNICATION PROTOCOLS

**hitechled**<sup>®</sup>

- PC LEDPRO
- HITECH 1200Hz
- OMV



- TOKHEIM KA ( KOPPENS AUTOMATIC ) ver. 4.2
- TOKHEIM JUPITER ST 39

**PROEDA**  
DATENMANAGEMENT

- PROEDA V21-02-01/CK



- LOGITRON GILBARCO 70RPLSUPSIT.E04 ( PASSPORT EUROPE )
- ENI
- GILBARCO ESTESO



- SCHEIDT & BACHMANN V11

**SCHENK**

- SCHENK 68000/68020 ver.2.02 2400 BAUD RATE
- SCHENK 68000/68020 ver.2.02 4800 BAUD RATE



- WAYNE DRESSER SYSTEM MARKETER PIGNONE SM2000/3000
- WAYNE DRESSER NUCLEUS 8 (1200 BAUD RATE MONODIREZIONALE )
- WAYNE DRESSER NUCLEUS 9 (9600 BAUD RATE BIDIREZIONALE )
- HITECH\_PIGNONE-TON1070S
- ENI
- WAYNE DRESSER ESTESO BIDIREZIONALE



- IFSF LON WORK ( It needs an additional interface)



- MASER AUTOMATION



- LAFON - MAGIC 2000

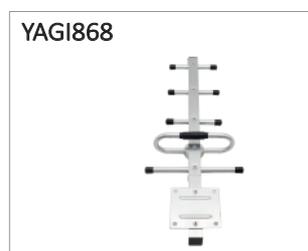
**Fortech**<sup>®</sup>

- FORTECH



- ALVIC

ACCESSORI



| Code         | Models    | Description             |
|--------------|-----------|-------------------------|
| D 100 001032 | RDC       | Remote control          |
| D 100 002322 | CT100     | Wired Keyboard          |
| D 100 002582 | CT100-W   | Wireless Keyboard       |
| D 100 002583 | WT868-O   | Wireless receiving unit |
| D 100 002200 | CONV_SU01 | USB - RS422 Converter   |
| D 100 002271 | WT868     | Wireless for PC         |

| Code         | Model    | Description                |
|--------------|----------|----------------------------|
| D 100 002285 | YAGI868  | Yagi Antenna               |
| O 091 000405 | ANT433-4 | Additional antenna for RDC |
|              |          |                            |
|              |          |                            |
|              |          |                            |