Multi Color LED graphic panel
HGM7-32x16-P10 i K

Data sheet

hitechled®
DIFFERENT LIGHTING

GENERAL FEATURES

172 mm. · 320 mm. · 45 mm.
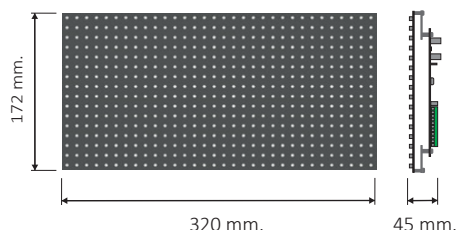
Technical features

Model without front panel	HGM7-32X16-P10 i K
Code	G 100 000347
Operating voltage	DC 5 V
Maximum Power Consumption, all LEDs ON	66 W
Graphic resolution	32 x 16 pixel
LEDs pitch	10 mm.
LED per pixel	1
LED type	RGB
Screen dimension	320 x 172 mm.
Colors	7
Characters per page (basic size fonts)	10
No. of selectable messages	99
GIF animations	Si
LEDs quantity	512
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.
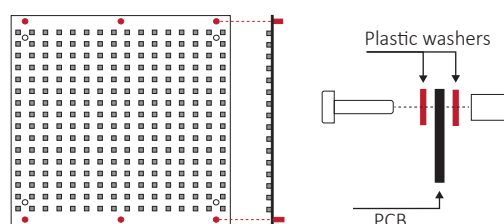
Suitable for installation inside the mini totems of the petrol station, operation in conjunction with the DIS or HDP series fuel price displays, the brightness is synchronized with that of the price displays, in case of autonomous operation, the SLUX01 brightness sensor must be added.

Graphic or text programs can be displayed statically, scrolling, curtain appearance, insertion from top or bottom, fade, random appearance and others ...
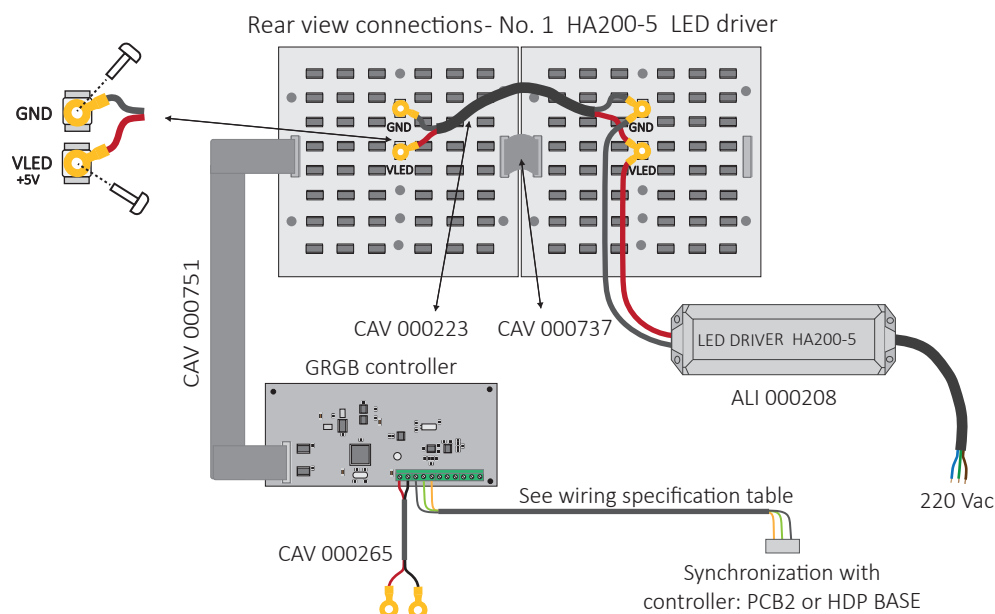
The main programs such as: SELF, SERV, CLOSED, OPEN, STATIC or ANIMATED ARROWS, TO RIGHT, TO LEFT or BOTH are already stored in the GRGB control board. On request it is possible to customize and insert any additional programs with ad hoc texts and graphics within the limit allowed by the graphic resolution 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 programmation, 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.
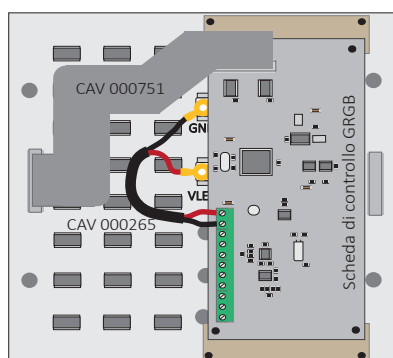
⚠ WARNING !!!

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).
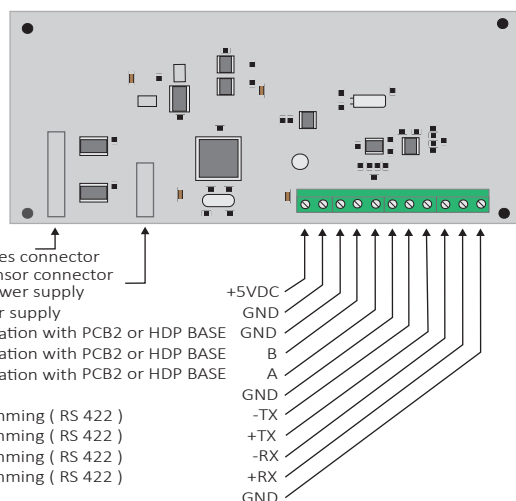

Plastic washers

PCB

100.000 h · 3 Years WARRANTY · 5 VDC · RoHS · CE

CONNECTIONS

Rear view connections- No. 1 HA200-5 LED driver

GND

VLED +5V

CAV 000751

CAV 000223   CAV 000737

LED DRIVER HA200-5

ALI 000208

GRGB controller

220 Vac

See wiring specification table

CAV 000265

Synchronization with controller: PCB2 or HDP BASE

GRGB controller, location

CAV 000751

GN

VLE

CAV 000265

Scheda di controllo GRGB

GRGB controller, Connections

LED modules connector	
SLUX01 sensor connector	
Positive power supply	+5VDC
GND power supply	GND
Synchronization with PCB2 or HDP BASE	GND
Synchronization with PCB2 or HDP BASE	B
Synchronization with PCB2 or HDP BASE	A
	GND
PC programming (RS 422)	-TX
PC programming (RS 422)	+TX
PC programming (RS 422)	-RX
PC programming (RS 422)	+RX
	GND

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 trough 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.

Pag. 2/5   February 2021 - rev.2   Subject to change without notice, errors and omissions exepted.

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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

70 mm.
36 mm.
220 Vac
300 mm.
245 mm.
260 mm.
38 mm.
1000 mm.
5 Vdc
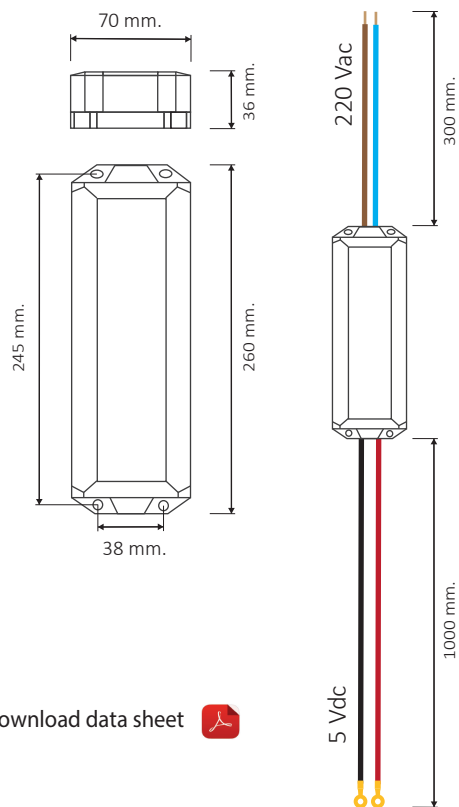
Download data sheet

⚠ 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 000223	260 mm.	INCLUDED	Red-black wires for power, connection between 2 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

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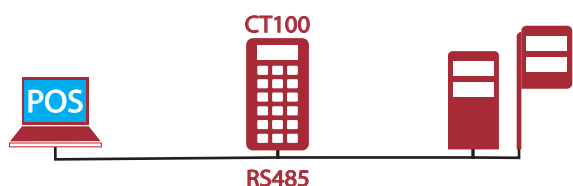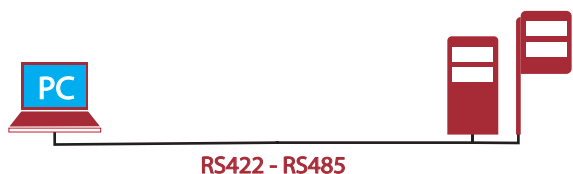
PROGRAMMING

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
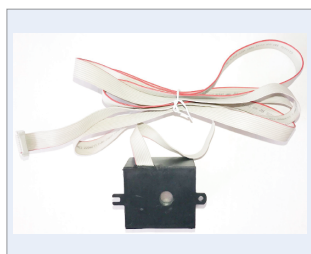

RDC

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	Brighness sensor	Brightness sensor must be added in case of autonomous operation