DMGI1664CF

QUICK INSTALLATION GUIDE

RGB LEDs Matrix display
especially suitable for indoor applications

DISPLAY CONFIGURATION

Display initializes automatically when connecting it to power supply and shows firmware version, ID adresse and option data (IP…). Then it shows last visualized program (execution mode) or remains with display off (STOP mode) awaiting for any comand. The instrument has a default demo program in memory.

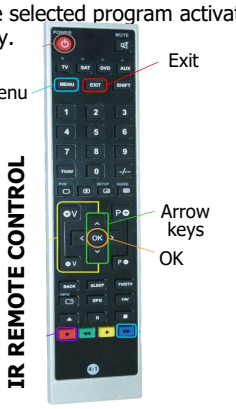
The **Dynamic 3** (Configurationand Program Editor) application is used to configure the display and/or modify the information displayed on the screen. This application, **USB** drivers, as well as user manuals for **Dynamic 3**, **DMG-TCP/ASCII**, **DMG-MODBUS** and **DTPM** user manuals can be free downloaded from our website (Dynamic 3 compatible with Windows 7 and above).
Dynamic 3 sallows user to modify/create the program sequences that will be displayed. It is possible to choose character types, the mode how the messages will appear, provide effects, graphics (depending on the model), temporary variables (hour, date, countdown) and numeric (or alphanumeric) variables in real time. It is also possible to create or import graphics and new character types. Programms can be directly displayed or easily transferred to the device memory in file format to be recovered afterwards and then offline visualized.
Indicator configuration from a PC using **Dynamic 3** can be done through **RS232**/**RS485**, **Ethernet** or **WiFi** (options) besides of **USB** (default).

The option of 4 or 8 digital inputs can work as independent inputs where each input corresponds to a program to be displayed, binary inputs of 4/8 bits (up to 16/256 programs to be displayed) or binary inputs of 3/7 bits + 1 strobe bit to enable the inputs. It is also possible to display the programs in sequential form with a programmable scan interval.

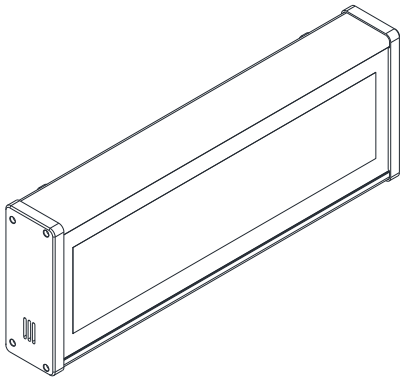
The option of analog input have 2 measuring channels of ±10V or ±20mA. The input type (V or mA), the input signal range as well as the display range (within a maximum range of ±32000 points) is fully configurable for each channel.

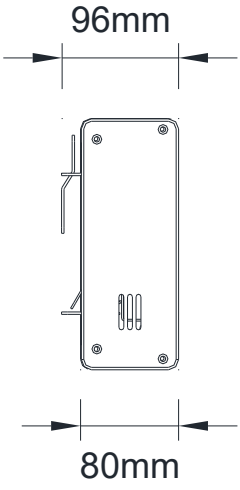
The default Internet IP address is 192.168.1.100. The communication, optional modules and rest of internal settings are configured through **Dynamic 3**.
Network communications with control of display through an external device as a PLC or PC are available through RS232, RS485, Ethernet or WiFi. The available protocols are **DTPM** (native protocol), **MODBUS RTU**, **MODBUS TCP/IP, TCP-ASCII** and **SNTP.**

The option of infra-red (IR) optional remote control allows to actívate memorized programmed .Press **MENU** key, select submenu **PROGRAMMES** and desired program on the list of programs stored using arrow keys △ and ▽, press **OK** button, the selected program activates immediately.



DIMENSIONS





According to 2012/19/UE Directive, You cannot dispose of it at the end of its lifetime as unsorted municipal waste. You can give it back, without any cost, to the place where it was adquired to proceed to its controlled treatment and recycling.

TECHNICAL SPECIFICATIONS

SPECIAL FUNCTIONS

Automatic brightness intensity control or by software..... (0-100%)
Font types and custom graphics editor.
Up to 26 internal variables for real-time monitoring.

POWER SUPPLY AND FUSES

DMGI1664CF: .....88-264V AC or 125-373V DC (default)
88-132V AC 47/63Hz (special configuration)
Maximum power rating:..... 81VA/ F 5A

VISUALISATION

Graphic resolution..... 16 x 64 (pixels)
Character height 53mm ..... Approx. max. reading dist. ≤ 20m
Character height 153mm ..... Approx. max. reading dist. ≤ 55m
LED diameter ..... Ø 3mm
Pitch 7.2mm
LED type ..... SMD
LED colour ..... RGB (7 couleurs)
Angle vision 120º
Numerous character types.
Maximum number of static characters per line..... ...8/1 ou 10/2

ENVIRONMENTAL CONDITIONS

Working temperature ..... -10ºC ÷ 60ºC
Relative humidity (non-condensing)..... <90% @ 40ºC
Protection degree IP54

MATERIALS

Frontal display ..... Smoked-grey methacrylate
Case ..... Black aluminium
Weight (approx.) 5kg

COMUNICATION

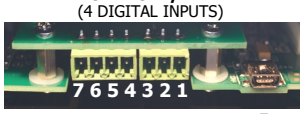
Ports ..... Mini USB (default)
..... RS232/RS485*, Ethernet 10/100 or WiFi** (option)
Protocols DTPM, MODBUS-RTU, TCP-ASCII, MODBUS TCP/IP, SNTP
*Transmission speed .... 1200 to 115200 Baud (configurable)
**availability depending on radio regulation of the country

TEMPERATURE SENSOR (OPTION)

Accuracy (-15ºC ÷ 60Cº) ..... ≤ ±1.5ºC

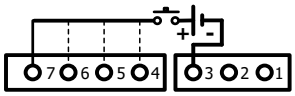
WIRING CONNECTION

OPTION /K4:
(4 DIGITAL INPUTS)

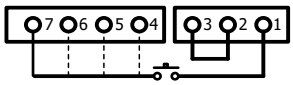


DIGITAL INPUTS	
PIN 1	24V DC
PIN 2	GND
PIN 3	COMMON INPUTS
PIN 4	INP 4 / STROBE
PIN 5	INP 3
PIN 6	INP 2
PIN 7	INP 1

USB Port

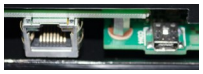


With external excitation (5-24V DC)



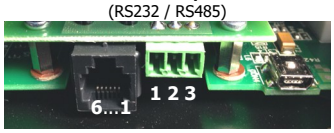
With internal excitation

OPTION /NE:
(ETHERNET)



ETHERNET Port | USB Port

OPTION /X:
(RS232 / RS485)



RS 232	
PIN 1	GND
PIN 2,3	N.C.
PIN 4	TxD
PIN 5	RxD
PIN 6	5V DC OUT

RS 485	
PIN 1	B
PIN 2	NC
PIN 3	A

USB Port

WARNING
Isolation:
3000Vrms for 1 minute between input/output and power supply terminals.

OPTION /K8:
(8 DIGITAL INPUTS))

DIGITAL INPUTS	
PIN 1	INP 1
PIN 2	INP 2
PIN 3	INP 3
PIN 4	INP 4
PIN 5	INP 5
PIN 6	INP 6

DIGITAL INPUTS	
PIN 7	INP 7
PIN 8	INP 8 / STROBE
PIN 9	N.C.
PIN C	COMMON INPUTS
PIN -	GND
PIN +	24V DC

OPTION /NW:
(ETHERNET WiFi)

ANT. WiFi | USB Port

Access to connectors

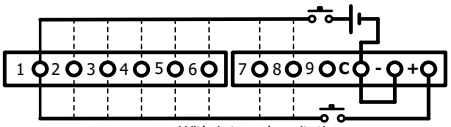
POWER SUPPLY
85-264V AC
125-373V DC
81VA

Recommended fuse: **5A**

To access the connection terminals, remove the rear cover and proceed to make the connections accordingly. Replace the cover once done.
The display has 2, 3 or 4 rear connectors. Their arrangement is as shown in the figures. The types of connectors are: RJ45 (Ethernet), Mini-B (USB), RJ12 (RS232), Mini combicon (RS485/ Analog/ Digital inputs), C14 (power supply) and SMA (old WiFi).

The terminal strip for RS485 and digital inputs accept cables with a section between 0.14mm² and 1.5mm² (AWG 28 ÷ 16). To make the connections, strip the cable leaving 7mm in the air and insert it into the appropriate terminal. Finally fix the cable in the connector and connect to the instrument.

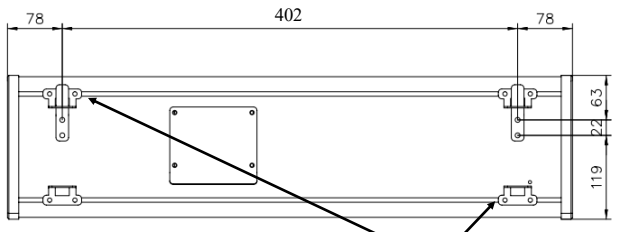
With external excitation: 5-24V DC



With internal excitation

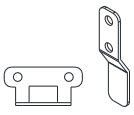
MOUNTING

Fixing brackets for wall mounting are supplied with the display.



Rear view of the indicator
Horizontal rails with mounting brackets

Mounting support



CE conformity.

Directives	EMC 2014/30/EU	LVD 2014/35/EU
Standards	EN 61326-1	EN 61010-1

WARNING: If this instrument is not installed and used in accordance with this instructions, the protection provided by it against hazards may be impaired.

To meet the requirements of EN 61010-1 standard, where the unit is permanently connected to main supply, its is obligatory to install a circuit breaking device easy reachable to the operator and clearly marked as the disconnecting device.

To guarantee electromagnetic compatibility, the following guidelines should be kept in mind:

IMPORTANT! To guarantee electrical safety according to EN 61010-1 a protective external fuse against overcurrents must be installed.

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