

# HMI Touch Display CGHMI 4.3, 7, 10, 15



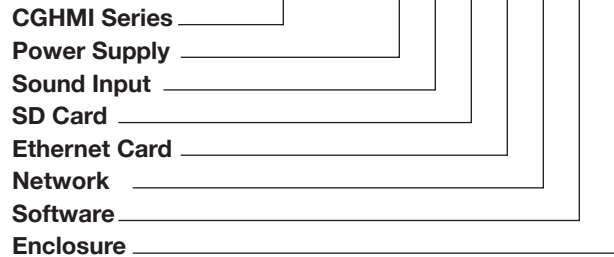
- High definition touch screen in 65,536 colors, TFT LCD
- Display sizes 4.3, 7, 10 and 15"
- USB host, 2 Serial ports, Ethernet and SD card slot
- Network Cards: ModBus, ProfiBus-DP, ProfiNet, DeviceNet, Ethernet/IP, CANopen, EtherCAT, and CCLink
- WinCE 6.0 Platform
- Aluminum, Stainless Steel and Plastic Front Bezel
- IP65, optional IP66K (Stainless Steel Front Bezel)

## Product Description

## Ordering Key **CGHMI750 1 1 1 1 0 1 0**

The CGHMI is a touch display panel available in four sizes: 4.3, 7, 10 and 15" (measured diagonally). Display TFT type, LED backlight in 65,563 colors. aluminum, plastic and stainless steel bezel; front panel IP65 and optional IP66K with stainless steel type; Eth-

ernet, USB Host, SD card slot and eight types of networking communications. 11-36VDC or 90-250VAC supply voltage with lower power consumption. Configuration software downloadable from [www.Gavazzi-Online.com](http://www.Gavazzi-Online.com).



## Type Selection

HMI Series	Power Supply:	Sound Input:	SD Card Slot:	Ethernet Card:
CGHMI450	0: 90 - 250 VAC	0: None	0: None	0: None
CGHMI730	1: 11 - 36 VDC	1: Yes	1: Yes	1: Yes
CGHMI750				
CGHMI1050				
CGHMI1550				

Network:	Software	Enclosure
0: ModBus	1: CG Design Studio	0: Standard CGHMI450, 730, all Plastic
1: ProfiBus-DP	2: CG Design Studio Plus	CGHMI750: Aluminum front, Plastic rear,
2: ProfiNet	3: No software, WinCE 6.0 Core platform only	CGHMI 1050, 1550: Aluminum front,
3: DeviceNet	4: No Software, WinCE 6.0 Pro platform for	metal rear
4: Ethernet/IP	SCADA	1: Optional CGHMI750, 1050, 1550 only,
5: CANopen		Stainless Steel front
6: EtherCAT		
7: CC-Link		

## Part Numbers of HMIs

Part Number	Description	SD Card	Ethernet	Sound Card	Other Network
CGHMI4501010010	HMI 4" PLASTIC 11-36VDC MODBUS	Yes	None	N/A	Optional
CGHMI4501011010	HMI 4" PLASTIC 11-36VDC MODBUS ETHERNET	Yes	Yes	N/A	Optional
CGHMI7300010010	HMI 7" PLASTIC 90-250VAC MODBUS	Yes	None	N/A	N/A
CGHMI7300011010	HMI 7" PLASTIC 90-250VAC MODBUS ETHERNET	Yes	Yes	N/A	N/A
CGHMI7301010010	HMI 7" PLASTIC 11-36VDC MODBUS	Yes	None	N/A	N/A
CGHMI7301011010	HMI 7" PLASTIC 11-36VDC MODBUS ETHERNET	Yes	Yes	N/A	N/A
CGHMI7500011010	HMI 7" ALUMINUM 90-250VAC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI7500011011	HMI 7" STAINLESS STEEL 90-250VAC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI7501011010	HMI 7" ALUMINUM 11-36VDC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI7501011011	HMI 7" STAINLESS STEEL 11-36VDC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI10500011010	HMI 10" ALUMINUM 90-250VAC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI10500011011	HMI 10" STAINLESS STEEL 90-250VAC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI10501011010	HMI 10" ALUMINUM 11-36VDC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI10501011011	HMI 10" STAINLESS STEEL 11-36VDC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI15500011010	HMI 15" ALUMINUM 90-250VAC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI15500011011	HMI 15" STAINLESS STEEL 90-250VAC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI15501011010	HMI 15" ALUMINUM 11-36VDC MODBUS ETHERNET	Yes	Yes	Optional	Optional
CGHMI15501011011	HMI 15" STAINLESS STEEL 11-36VDC MODBUS ETHERNET	Yes	Yes	Optional	Optional

## Part Numbers of Accessories

Part Number	Description
CGCA-PC3-80	PROGRAM DOWNLOAD CABLE FROM PC TO HMI (RJ45 TYPE)
CGHNET1	PROFIBUS-DP NETWORK CARD FOR ALL MODELS EXCEPT CGHMI730
CGHNET2	PROFINET NETWORK CARD FOR ALL MODELS EXCEPT CGHMI730
CGHNET3	DEVICENET NETWORK CARD FOR ALL MODELS EXCEPT CGHMI730
CGHNET4	ETHERNET/IP NETWORK CARD FOR ALL MODELS EXCEPT CGHMI730
CGHNET5	CANOPEN NETWORK CARD FOR ALL MODELS EXCEPT CGHMI730
CGHNET6	ETHERCAT NETWORK CARD FOR ALL MODELS EXCEPT CGHMI730
CGHNET8	CC-LINK NETWORK CARD FOR ALL MODELS EXCEPT CGHMI730
CGHSB075	SOUND BOARD FOR CGHMI750
CGHSB0105	SOUND BOARD FOR CGHMI1050/1550
CGSF-01	SYMBOL FACTORY - CG DESIGN STUDIO PLUS

**Technical Specifications**

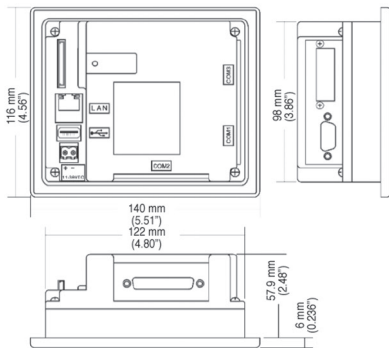
HMI Series	CGHMI450	CGHMI730	CGHMI750	CGHMI1050	CGHMI1550
<b>Display</b>					
Operating System	Windows CE 6.0 optimized for CG Design Studio Development Software available for OEM with standard CE				
Display Size & Type	4.3" TFT	7" TFT		10" TFT	15" TFT
Active Display Area (W x H)	95 x 54 mm (3.74" x 2.12")	152 x 91 mm (5.98" x 3.58")		203 x 152 mm (7.99" x 5.98")	304 x 228 mm (11.96" x 8.98")
Display Position	Both Horizontal & Vertical				
Maxium Color	65,536 colors (16Bit)				
Resolution	480 x 272	800 x 480		1024 x 768	
Backlight Type Life	LED 30K Hours	LED 50K Hours			CCFL 50K Hours
Brightness Adjustment	Yes				
Screen Saver	Yes				
Touch Screen Type	Resistive Analog				
<b>Main Hardware</b>					
Processor, CPU Speed	ARM Cortex-A8, 667Mhz			ARM Cortex-A8, 1Ghz	
Flash Memory (ROM)	128MB				
SDRam	256MB				
SD Card Slot	Yes				
Real Time Clock	Yes				
<b>Interfaces</b>					
RS232, DB9 Male	1				
RS232, RS422/RS485, DB25 Female	1				
Ethernet 10/100 Mbps, RJ45 Jack	Optional	1		2	
USB Host 1.1	1				
<b>Other Networks (Slave)</b>					
ProfiBus-DP	Optional	N.A.	Optional		
ProfiNet	Optional	N.A.	Optional		
DeviceNET	Optional	N.A.	Optional		
CANopen	Optional	N.A.	Optional		
EtherCAT	Optional	N.A.	Optional		
EtherNet/IP	Optional	N.A.	Optional		
CC-Link	Optional	N.A.	Optional		
<b>General Specifications</b>					
Power Supply	11-36 VDC	11-36 VDC or 90-250 VAC			
Power Consumption	10W	12W	13W	15W	27W
Power LED Indicator	Yes				
Protection Structure	Front Panel IP65 (Comparable to NEMA4) all plastic and aluminum models, IP66K all stainless Steel models/Rear IP20				
Outer Dimensions (W x H x L)	140 x 116 x 57 mm (5.51 x 4.56 x 2.24")	212 x 156 x 57 mm (8.35 x 6.14 x 2.24")		325 x 263 x 56 mm (12.79 x 10.35 x 2.20")	400 x 310 x 56 mm (15.75 x 12.20 x 2.20")
Mounting Depth (mm)	51 (2.007")			50 (1.968")	
Panel Cutout (W x H)	123 x 99 mm (4.84" x 3.89")	197 x 141 mm (7.75" x 5.55")		310 x 248 mm (12.20" x 9.76")	367 x 289 mm (14.45"x11.38")
Front Bezel, Housing Material	Plastic			Aluminum	
Stainless Steel Front Bezel (optional)	NA			Option (IP66K)	
Installation	Panel Mount				
Net Weight (kgs)	0.5 Kgs (1.1 lbs)	1.2 Kgs (2.56 lbs)	1.4 Kgs (3.08 lbs)	3.6 Kgs (7.93 lbs)	5.1 Kgs (11.24 lbs)

## Environmental Specifications

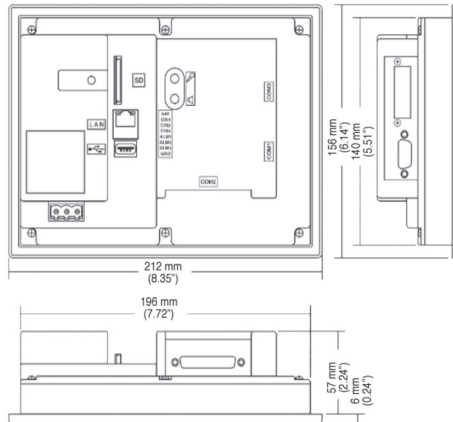
- Operating Temperatures: 0 - 50°C (32 - 122°F)
- Storage Temperatures: -20 - 60°C (-4 - 140°F)
- Relative Humidity: 10 - 90% at 40°C, non-condensing
- Shock (operation): 15g at 11msec
- EMI: Complies with FCC class A
- CE: Complies with EN 61000-3-2:2006 and
- EN61000-3-3-1995+A2: 2005
- Front Panel IP65 (Comparable to NEMA4) all Plastic and Aluminum models, IP66K all Stainless Steel models/Rear IP20
- Safety Standards: cUL, CE and RoHS

## Dimensional Drawings (Rear, Side and Bottom View)

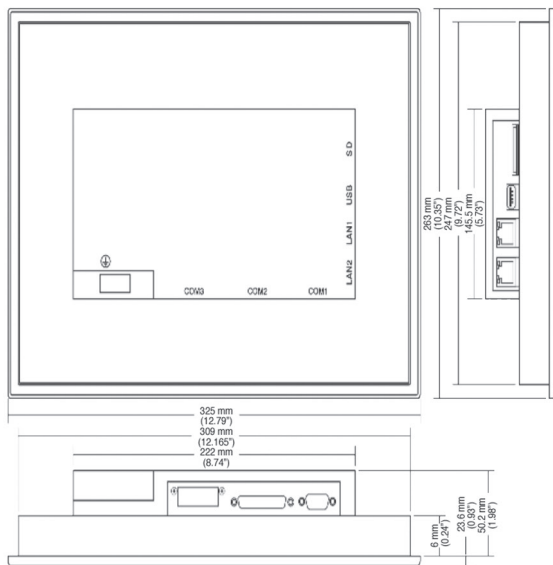
**Dimensional drawings of the HMI 4.3"**



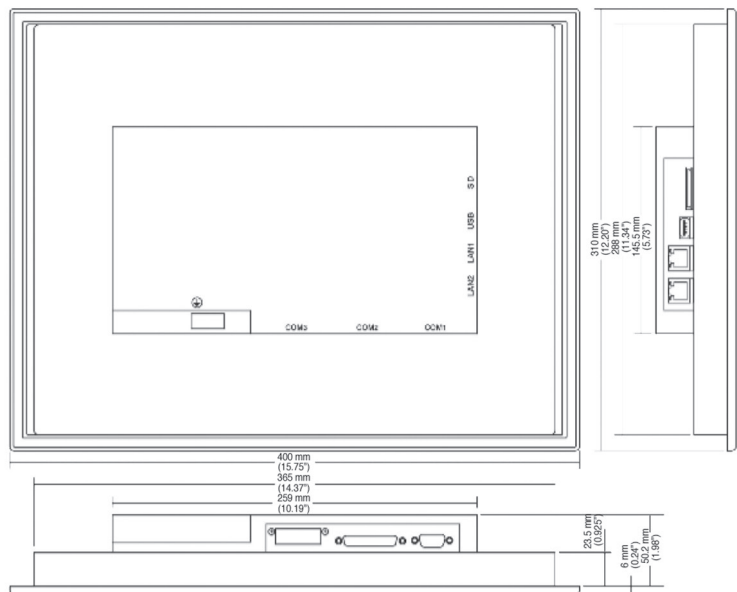
**Dimensional drawings of the HMI 7"**



**Dimensional drawings of the HMI 10"**



**Dimensional drawings of the HMI 15"**



## PLC and Inverter Drivers

OPC server within CG Design Studio includes many drivers for PLCs, inverters and 3rd party devices for both Serial (RS232, RS422, RS485) and Ethernet ports. The CGHMI is able to communicate on both ports simultaneously.

### Serial Drivers

Manufacturers	Protocols	Models
Allen Bradley	DF1	SLC 500 Series, MicroLogix, CompactLogix, PLC5
Allen Bradley	DH485	SLC 500 Series, MicroLogix
Bechhoff serial	KS8000	CX 90X0, CX 10X0 Series
Danfoss (inverter)	FC	FC Series for Aluminum Drive /HVAC Drive
Delta	DVP	DVP-ES, DVP-EX, DVP-SS, DVP-SA, DVP-SX, DVP-SC, DVP-EH, DVPEH2
Fatek	Fatek	FB Series
Festo	CI Command	FEC Series
Fuji	T-Link	Micrex-F Series
Fiji	Micrex Series	SPH200, SPH300, SPH300EX, SPH2000
GE Fanuc	Series Ninety (SNP)	Micro PLC, GE90-30/909-70, VerzaMax
GE Fanuc	SNP-X	Micro PLC, GE90-30/909-70, VerzaMax
Hitachi	Hitachi Hi	Micro EH, EHV, H Series PLC's
IDEC IZUMI	Data Link	MicrtoSmart, OpenNet, Controller, Micro3
Keyence	ASCII	KV700, KV1000, KV3000, KV5000
Koyo	Direct Net	DL05, 06, 105, 205, 305, 405
Koyo	K SEQUENCE	DL05, 06, 105, 205, 305, 405
LENZE (inverter)	LECOM	8200, 9300 vector, 9300 servo controller 9300 servo PLC, Driver PLC, 8200 Motec
LG	LG Cnet	GM, MK Series-K80S, K120S K200, K300, K1000S, XGB, XGK Series
Matsushita	Mewtocol	FP Series-FPO, FP2, FP-X, FP-Sigma, FP2SH
Messung	Modbus TRU	Nextgen 2000, 5000 Series
Mitsubishi	Melsec	KX, A, QnA, Q Series, FX Direct CPU port
Modicon	Modbus ASCII, RTU Master	Any Device
Moeller	CANopen	XC100, XC200 Series (via CANopen optional converter)
Omron	HostLink	CV, CVMX, CX, CH, CS, CJ, CQM1H Series
Omron	Fins	CP, CS, CJ Series
Schneider	UniTeleway	TSX-Micro, TSX Series
Siemens	PPI	S7-200
Siemens	MPI	S7-300/400
Teco	Modbus RTU	MA, CV Series
Teco (inverter)	Modbus RTU	MA, CV Series
Toshiba	Computer Link, T- Series Serial	S2E/ST2 Series
Toshiba	T1-micro Series Serial	T1-Micro
Vigor	Vigor Serial	M, VB, VH Series
Vipa	MPI	100V, 200V, 300V, 300S, 500S
Yaskawa	Memobus-MP Series	Memocon, MP-900, MP-2000 Series
Yaskawa (inverter)	Memobus-MP Series	F1000, V1000, T1000, A1000
Yokogawa	Factory Ace Fa-M3 Serial	FA-M3 Model F3sPX Series

## Ethernet Drivers

Manufacturers	Protocols	Models
Allen Bradley Ethernet	Ethernet/IP, CIP	SLC 500 Series, MicroLogix, CompactLogix, ControlLogix, PLC5 Series
Beckhoff Ethernet	Beckhoff Ethernet	CX90x0, CX10x10 Series
Delta Ethernet	Delta Ethernet Protocol	DVP-SV Series
Fatek Ethernet	Fatek Ethernet	FB Series
Festo Ethernet	Ethernet CI Command	FEC Series
GE Ethernet	SRTP	GE 90-30/90-70, Versa Max
Hitachi Ethernet	H Series Ethernet	EH, EHV and H Series PLC
Keyence Ethernet	Keyence Ethernet	KV 700, KV1000, KV3000 & KV5000
Koyo Ethernet	Direct ECOM	DL05, 06, 205, 405
LG Ethernet	LG Fast Ethernet	GM Series, MK Series 200S, 300S, 1000S, XGB & XGK Series
Mitsubishi Ethernet	A, Q, QnA & FX Ethernet	A, Q, QnA & FX Series
Modicon	Modbus TCP Master	Any Device
Omron Ethernet	FINS UDP	CH, CS & CJ Series
Siemens S7 Ethernet	Siemens TCP/P	S7-200, 300, 400 (Connection Vis CP card at PLC), S7-1200
Toshiba Ethernet	Toshiba Ethernet	T Series, V Series
Vipa	TCP/IP	200V, 300S, 500S
Yaskawa MP Ethernet	Memobus Ethernet	MP-900 & MP-2000 Series
Yokogawa Ethernet	Yokogawa FA-M3 Ethernet	FA-M3 model F3SPX series

## Networking Options

The networking cards with slave function are easily inserted in.  
 Available Networks: Profibus-DP, ProfitNet, DeviceNet,  
 Ethernet/IP, CANopen, EtherCAT, CC-Link.

Refer to Ordering Key on page 1.

## Software

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### CG Design Studio

- Supports many PLC drivers
- Recipe management
- Multilingual Script programming supported
- Data acquisition complied with FDA 21 CFR
- Reports, Web Server, Alarm management
- Real-time trends, bar graphs & historical trends
- Optional CG Design Studio Plus
- Data exchange with two different PLCs
- Free and user-friendly editing software
- On-line and Off-line simulation
- 3 types of screens in Page, Template and Pop-up
- Common template for all the screens
- Internal memory registers and security
- Real time Alarms, Historical Alarms and Events
- Scheduler with Delay, Daily, Weekly and Monthly timers
- Advanced components- Dial, Level, Analog Meter, Slider, Thermometer, Digital LED
- Special function buttons for Alarm Control, Historical trend control, Scheduler control, Data logging control, Page control etc.
- User friendly objects for Label, Text box, Button, Language selector, etc

1. **CG Design Studio Software**, basic editing and data acquisition software, downloadable free from [www.Gavazzionline.com](http://www.Gavazzionline.com)

**CG Design Studio Software includes:**  
 OPC server, Historical Viewer, HMI Remote Viewer

2. **Symbol Factory:** This is an extensive library of symbols. Offer 4000 High-resolution symbols with run time animation. Transparent or color background can be selected for any symbols. Within CG Design Studio only 1st symbol to be selectable in each category. CG Design Studio plus Symbol Factory, all symbols to be selectable. Symbol Factory is sold separately by ordering: CG Design Studio Plus.

## Optional Accessories

Part Number	Description
<b>CGSF-01</b>	SYMBOL FACTORY - CG DESIGN STUDIO PLUS
<b>CGCA-PC3-80</b>	PROGRAM DOWNLOAD CABLE FROM PC TO HMI (RJ45 TYPE)