

# AGI 4xx



## General description

DEIF's AGI 400 series HMI is a cost effective, powerful, flexible and intelligent touch screen solution that is based on Linux<sup>®</sup> RT operating system with HTML5 support.

The AGI 400 is suitable for a wide range of applications ranging from client terminals to operating as a mini SCADA system or Industrial Internet of Things (IIoT) controller with cloud support through MQTT. PLC capability for advanced applications is possible through the CODESYS option.

The AGI 400 eliminates the need for other instruments, which saves space, wiring, time and cost without compromising quality. The quality is apparent in the look and feel of the AGI 400, and also in the ATEX, and Marine approvals from DNV-GL and Lloyd's Register. Therefore the AGI 400 is perfect for marine applications.

Standard defined industrial communication protocols enables communication with DEIF Multi-line controllers, as well as third party electronics.

## Applications

The AGI400 series can be used in a wide range of cost and energy saving applications for a greener world, for example:

- Power management system integration
- Monitor energy production and consumption
- Manage active alarms and see alarm history
- See trends from measured values

## Main features

### State-of-the-art HMI

- Display supports multi-touch widgets and gesturing
- Dimmable LED backlight
- Advanced programming tools and applications
- Complimentary DEIF application templates
- Intelligent gateway (up to 3 independent Ethernet networks)
- SD card slot
- Two USB 2.0 hosts

### Designed for marine environments

- Scratch, UV and chemical resistant
- Class approved
- Suitable for switchboards, cabinets and for remote locations

### Product flexibility

- Master/Client configurations
- HTML5 Web/remote Chromium browser
- Remote operation via VNC
- Email client with SSL and FTP support, and cloud support with MQTT
- Extensive protocol support (including OPC UA Server and Client)



### Secure

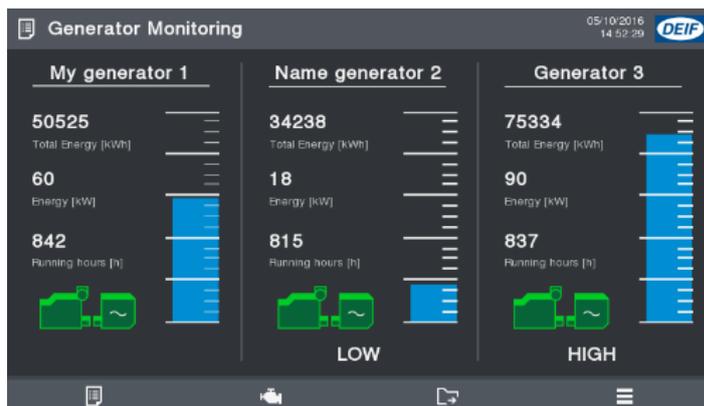
- Multiple user login levels
- Cyber security tests in compliance with draft IEC 62443

### Options

- PLC functionality with the CODESYS V3 option
- CANbus and I/O expansion modules



### Example of energy monitoring

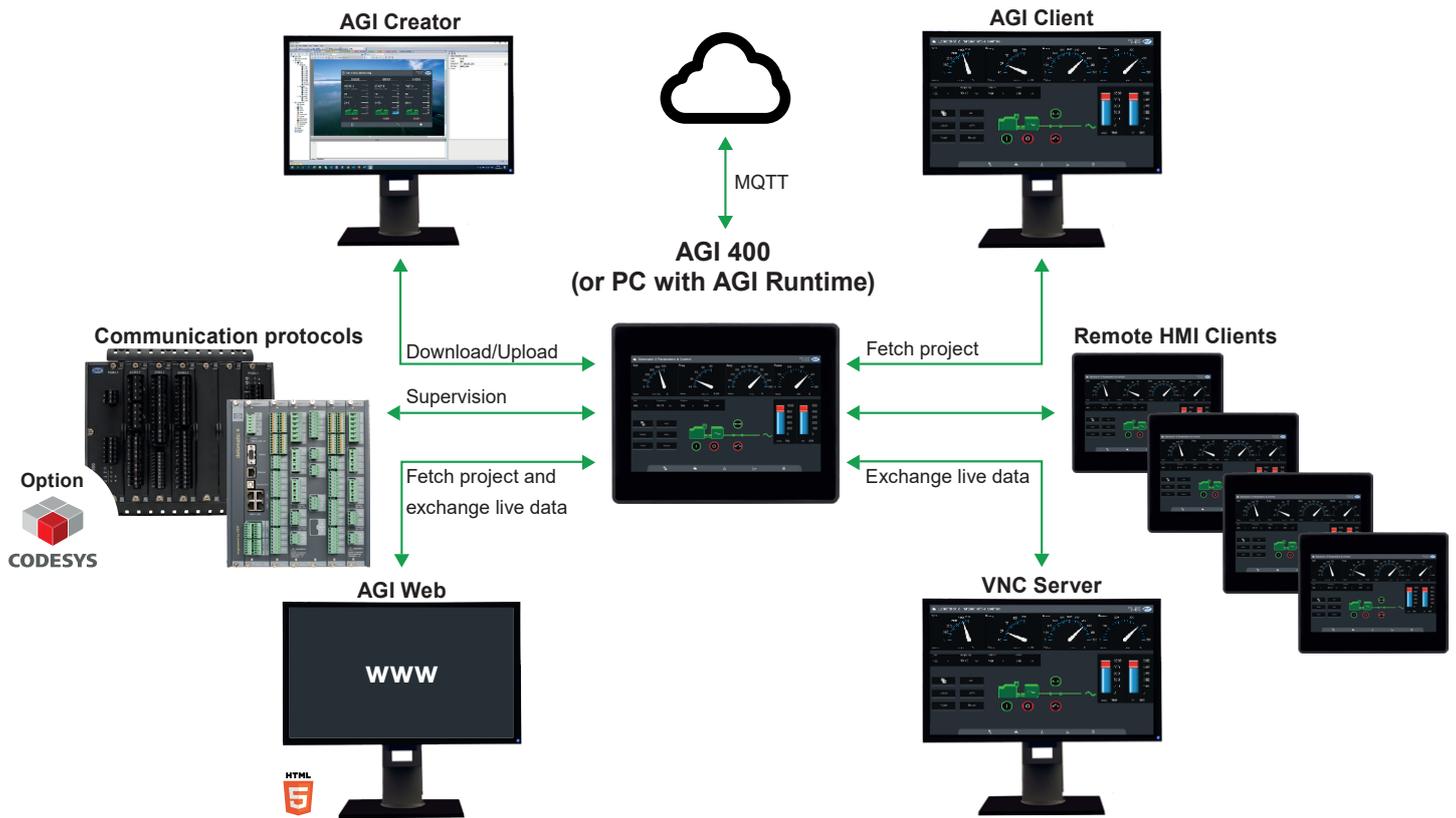


## Technical specifications



	AGI 407	AGI 410	AGI 415	AGI 421
Item number	2912460020.01	2912460020.02	2912460020.03	2912460020.04
<b>Display</b>				
Type	TFT LCD	TFT LCD	TFT LCD	TFT LCD
Screen size	7 inches	10.1 inches	15.6 inches	21.5 inches
Resolution	800 × 480	1280 × 800	1366 × 768	1920 × 1080
Colours	24 bit (16 million)	24 bit (16 million)	24 bit (16 million)	24 bit (16 million)
Brightness (cd/m2)	500	500	400	300
Aspect ratio (H/V)	16:9	16:9	16:9	16:9
Viewing angle (H/V)	170/170	170/170	160/160	178/178
Backlight	LED (auto off option)	LED (auto off option)	LED (auto off option)	LED (auto off option)
Backlight lifetime	50000 hours (at 25 °C)	50000 hours (at 25 °C)	50000 hours (at 25 °C)	50000 hours (at 25 °C)
Dimming	0 to 100 %	0 to 100 %	0 to 100 %	0 to 100 %
<b>Power supply</b>				
Power supply voltage	24 V DC (10 to 32 V DC)			
Current consumption	0.7 A at 24 V DC (max.)	1 A at 24 V DC (max.)	1.2 A at 24 V DC (max.)	1.7 A at 24 V DC (max.)
<b>CPU, memory and operating system</b>				
CPU	ARM Cortex-A9 Dual Core 800MHz		ARM Cortex-A9 Quad Core 800MHz	
Working memory	1 GB DDR		2 GB DDR	
Built-in memory	4 GB Flash / 64KB FRAM		8 GB Flash / 64KB FRAM	
Memory card	1 × SD card slot			
OS	Linux <sup>®</sup> RT			
<b>Interfaces</b>				
Ethernet	2 × 10/100 Mbit, 1 × 10/100/1000 Mbit			
USB	2 × USB 2.0 (hosts) - max. 500 mA			
Serial	RS-232, RS-485, RS-422, software configurable			
Expansion slots	2			
<b>Environment</b>				
Operating Temperature	-20°C +60°C			
Ingress protection	IP66 front, IP20 rear			
<b>Approvals</b>				
CE	DNV GL Type approved		UL508	
ATEX class 2	Lloyds Register		EU RO	

## Product flexibility



### AGI Creator

- Create and edit AGI project files.
- Upload AGI project files to an AGI device or AGI Runtime PC software.
- Licenced software with a 30 day full feature free trial.

### Server client configuration and remote access

- Use other AGI 4xx devices or AGI Client PC software as clients with an AGI 4xx server for remote monitoring and control.
- Up to four AGI clients or PC clients allowed on the same LAN.
- Access using web browsers (smartphone, tablet or computer) through the AGI's HTML5 compatible Web Server.
- Remote desktop access with VNC server\*.
- Push data to Cloud Services via MQTT standard protocol.

### Communication protocols

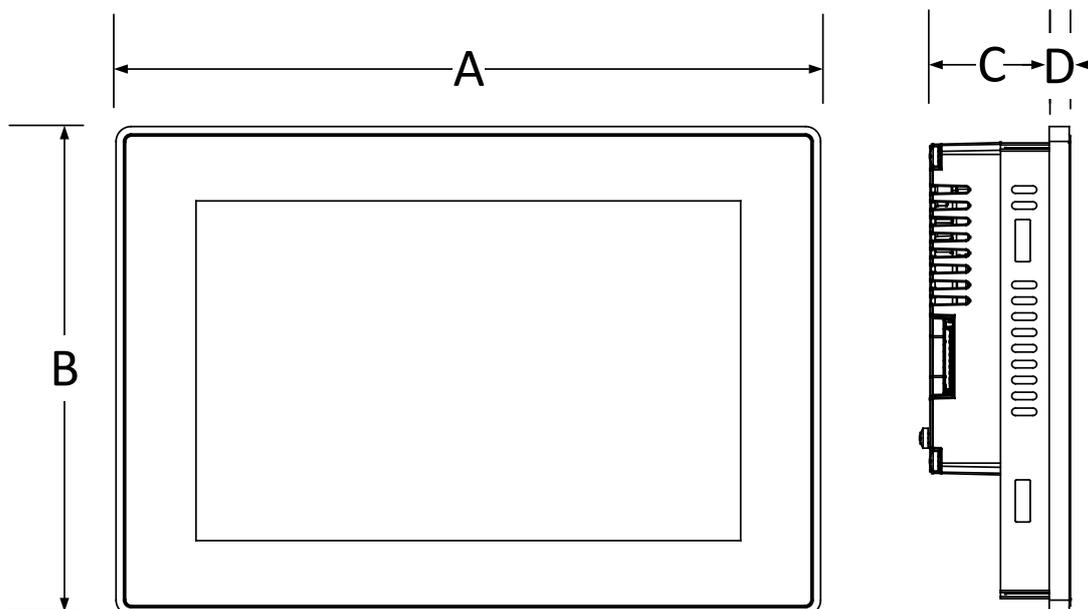
- J1939, Modbus RTU/TCP, CANopen and many more protocols are available.
- Connect to DEIF or third party equipment using the available protocols.
- Use the communication protocols to achieve SCADA and/or PLC support with the CODESYS\*\* option.

\* VNC not supported on AGI PC Runtime

\*\* Requires separate licence

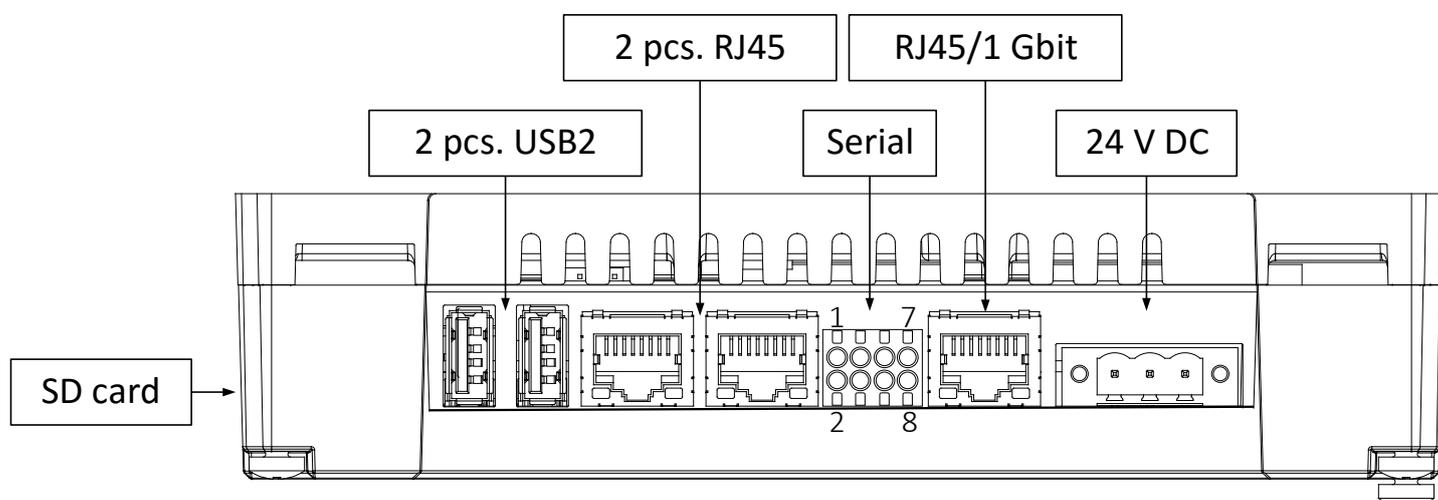
## Dimensions and connections

### Dimensions and cutout



	AGI 407	AGI 410	AGI 415	AGI 421
A	187 mm (7.36 in)	282 mm (11.10 in)	422 mm (16.6 in)	552 mm (21.7 in)
B	147 mm (5.79 in)	197 mm (7.80 in)	267 mm (10.5 in)	347 mm (13.66 in)
C	47 mm (1.85 in)	56 mm (2.20 in)	56 mm (2.20 in)	56 mm (2.20 in)
D	8 mm (0.31 in)	8 mm (0.33 in)	8 mm (0.33 in)	8 mm (0.33 in)
Panel cutout	176 mm × 136 mm (6.93 in × 5.35 in)	271 mm × 186 mm (10.67 in × 7.32 in)	411 mm × 256 mm (16.18 in × 10 in)	541 mm × 336 mm (21.3 in × 13.23 in)

### Connections



**For more information, please contact:**

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