

Remote display

## Data sheet and user manual



4921240616D

### 1. AGC 150 remote display

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## 1. AGC 150 remote display

## 1.1 About

The AGC 150 remote display is a controller used as a second display unit for an AGC 150 master controller. It mirrors the master controller and gives you access to all of its features. This enables a fast response from a remote location. Connecting the controllers is simple and a connection is established within seconds.

## 1.2 Connect the controllers

Connect the master controller and the remote display with an Ethernet cable. The connection can be point-to-point or through a switch. You can only connect one remote display to the master controller.

#### **Point-to-point connection**



#### **Connection through a switch**



See the AGC 150 installation instructions for information on how to mount the display. Use the following diagram to connect the display to the power supply:



## 1.3 Configure the controllers

### 1.3.1 Configure the master controller

You need to configure the master controller for use with a remote display.

Parameter	Text	Range	Default	Details
Remote OFF 9159 display ON view only OFF setup ON view + controls	<b>OFF:</b> The master controller does not connect to a remote display.			
	<b>ON view only:</b> Settings and actions on the master controller are shown on the remote display.			
				<b>ON view + controls:</b> Settings and actions are mirrored between the master controller and the remote display.

#### Settings > Communication > Remote display setup

### 1.3.2 Configure the IP addresses

The master controller and the remote display must have different IP addresses. You can configure the IP addresses locally on the controller or using the utility software.

#### Configure the IP addresses on the controllers

On the master controller:

1. Configure the IP address under **Settings > Communication > Ethernet setup**.

#### On the Remote Display:

- 1. Press and hold the Shortcut  $\textcircled{\textcircled{}}$  button.
- 2. Select *Ethernet setup* to configure the IP address for the remote display.

Remote unit local menu	
Service view	
IP: 192.168.18.8 Subnet: 255.255.255.0 Gateway: 192.168.18.1 MAC: 00.26.77.02.75.A3	

- 3. Once the IP address has been configured press the  $OK^{OOO}$  button to save.
- 4. The other parameters under Ethernet setup can also be change using the same method as for the IP address.
- 5. Press the *Back* O button to return to the settings menu.
- 6. Select *Remote display setup* to verify the IP address for the master controller.

#### Configure the IP addresses with the utility software

The IP addresses have to be configured separately for the master controller and the remote display.

#### On the remote display:

- 1. Connect to the remote display using the utility software.
  - This can be done with a USB connection or a TCP/IP connection, which requires an Ethernet cable.
  - When connecting with TCP/IP, you must know the remote display's IP address.
- 2. Select Option N configuration 😟 button in the top toolbar.

3. In the pop-up window, configure the network parameters for the remote display under the tab Network parameters.



4. Select the *Remote Display* tab to verify the IP address for the master controller.

Ø Network Parameters	_		Х
🚽 🏂 🍰 🖨 🔯			
Network parameters Remote Display			
Main unit IP address	192.168.1	18.7	
Port	22000		
/			
Main unit IP address Port	192.168.1 22000	18.7	

5. Click the Write to device button 🏂 in the top of the window. The controller will receive the new parameters.

#### On the master controller:

- 1. Connect to the master controller using the utility software.
- 2. Select Option N configuration 🔍 in the top toolbar.
- 3. In the pop-up window, configure the network parameters for the master controller under the tab Network parameters.

Ø Network Parameters		_	×
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Network parameters Remote Display Power	Management NTP parameters		
IP address	192.168.18.8		
Net mask	255.255.255.0		
Gateway	192.168.18.1		
DNS Primary IP	8.8.8.8		
DNS Secondary IP	8.8.4.4		

4. Select the Write to device button 🤔 in the top of the window. The controller will receive the new parameters.

Once you have configured the controllers, the remote display should be connected to the master controller and ready for use.

#### Troubleshooting

If the remote display is waiting for a connection to the master controller you will see this screen:

```
AGC150 REMOTE
```

Verify the following:

- 1. The master controller is configured for use with the remote display. Ensure the master controller is not set to OFF in Settings > Communication > Remote display setup.
- 2. The IP addresses are configured correctly. If the IP address for the master controller is changed after configuring the remote display, the IP address must be updated on the remote display.
- 3. The remote display and the master controller are connected correctly.

### 1.4 Settings

### 1.4.1 Remote display local menu

You can change the remote display setup. Press and hold the *Shortcut* button until the remote display local menu appears:

Remote unit local menu	
Settings	
Ethernet setup Remote display setup Password Display Type	

Text	Range
Ethernet setup	Configure the Ethernet address for the <b>remote display.</b>
Remote display setup	Configure the Ethernet address for the master controller.
Password	Configure the password for each password level. See <b>General product information, Controller overview, Password</b> in the <b>Designer's handbook</b> for more information about passwords.
Display	Configure light, contrast and so on for the remote display.
Туре	Change type of controller (only for the PREMIUM and EXTENDED option).
Software info	Information about the software in the <b>remote display</b> .

### 1.4.2 Display settings

You can configure the display settings for the remote display by pressing and holding the *Shortcut* button and selecting **Display**. Alternatively, you can use the utility software to connect to the remote display.

Parameter	Text	Range	Default
9151	Backlight dimmer	0 to 15	12
9152	Green LEDs dimmer	1 to 15	15
9153	Red LEDs dimmer	1 to 15	15
9154	Contrast level	-20 to +20	0
9155	Sleep mode timer	1 to 1800 s	60 s
9156	Enable (Sleep mode timer)	OFF ON	ON

# 2. Technical specifications

## 2.1 Electrical specifications

Power Supply			
Power supply range	Nominal voltage: 12 V DC or 24 V DC (operating range: 6.5 to 36 V DC)		
Voltage withstand	Reverse polarity		
Power supply drop-out immunity	0 V DC for 50 ms (coming from min. 6 V DC)		
Power supply load dump protection	Load dump protected according to ISO16750-2 test A		
Power consumption	5 W typical 12 W max.		
RTC clock	Time and date backup		

Supply Voltage monitoring		
Measuring range	0 V to 36 V DC (max. continuous operating voltage of 36 V DC)	
Resolution	0.1 V	
Accuracy	±0.35 V	

Display unit	
Туре	Graphical display screen (monochrome)
Resolution	240 x 128 pixels
Navigation	Five key menu navigation
Log book	Data log & trending facility
Language	Multi language display

## 2.2 Environmental specifications

Operation conditions	
Operating temperature (incl. display screen)	-40 to +70 °C (-40 to +158 °F)
Storage temperature (incl. display screen)	-40 to +85 °C (-40 to +185 °F)
Accuracy and temperature	Temperature coefficient: 0.2 % of full scale per 10 °C
Operating altitude	0 to 4000 m with derating
Operating humidity	Damp Heat Cyclic, 20/55 °C at 97 % relative humidity, 144 hours. To IEC 60255-1 Damp Heat Steady State, 40 °C at 93 % relative humidity, 240 hours. To IEC 60255-1
Change of temperature	70 to -40 °C, 1 °C / minute, 5 cycles. To IEC 60255-1
Protection degree	<ul> <li>IEC/EN 60529</li> <li>IP65 (front of module when installed into the control panel with the supplied sealing gasket)</li> <li>IP20 on terminal side</li> </ul>
Vibration	Response: • 10 to 58.1 Hz, 0.15 mmpp

Operation conditions	
	• 58.1 to 150 Hz, 1 g. To IEC 60255-21-1 (Class 2)
	Endurance:
	• 10 to 150 Hz, 2 g. To IEC 60255-21-1 (Class 2)
	Seismic vibration:
	• 3 to 8.15 Hz, 15 mmpp
	• 8.15 to 35 Hz, 2 g. To IEC 60255-21-3 (Class 2)
Shock	10 g, 11 ms, half sine. To IEC 60255-21-2 Response (Class 2) 30 g, 11 ms, half sine. To IEC 60255-21-2 Withstand (Class 2) 50 g, 11 ms, half sine. To IEC 60068-2-27, test Ea Tested with three impacts in each direction in three axes (total of 18 impacts per test)
Bump	20 g, 16 ms, half sine IEC 60255-21-2 (Class 2) Tested with 1000 impacts in each direction on three axes (total of 6000 impacts per test)
Safety	Installation CAT. III 600 V Pollution degree 2 IEC/EN 60255-27
Flammability	All plastic parts are self-extinguishing to UL94-V0
EMC	IEC/EN 60255-26

## 2.3 UL/cUL Listed

Requirements	
Installation	To be installed in accordance with the NEC (US) or the CEC (Canada)
Enclosure	A suitable type 1 (flat surface) enclosure is required Unventilated/ventilated with filters for controlled/pollution degree 2 environment
Mounting	Flat surface mounting
Connections	Use 90 °C copper conductors only
Wire size	AWG 30-12
Terminals	Tightening torque: 5-7 lb-in.
Current transformers	Use Listed or Recognized isolating current transformers
Communication circuits	Only connect to communication circuits of a listed system/equipment

## 2.4 Communication

Communication	
RJ45 Ethernet	Isolated Auto detecting 10/100 Mbit Ethernet port

## 2.5 Approvals

Standards
CE
UL/cUL Listed to UL/ULC6200:2019, 1. ed. controls for stationary engine gensets

**NOTE** Refer to www.deif.com for the most recent approvals.



Dimensions	Height: 173.3 mm (6.82 in) Depth: 44.7 mm (1.76 in)
Panel cutout	Length: 218.5 mm (8.60 in) Height: 158.5 mm (6.24 in) Tolerance: ± 0.3 mm (0.01 in)
Max. panel thickness	4.5 mm (0.18 in)
Mounting	UL/cUL Listed: Type complete device, open type 1 UL/cUL Listed: For use on a flat surface of a type 1 enclosure
Weight	0.79 kg

## 2.7 Legal information

### 2.7.1 Disclaimer

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The English version of this document always contains the most recent and up-to-date information about the product. DEIF does not take responsibility for the accuracy of translations, and translations might not be updated at the same time as the English document. If there is a discrepancy, the English version prevails.

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