Network Installation Sheet

SEDG-01 Ethernet DeviceNet Gateway ABB Product code: 3AUA0000051448

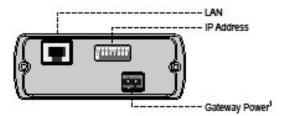
Product Overview

This module SEDG-01 is meant to be used with DriveBrowser PC software tool. DriveBrowser is a maintenance and monitoring tool for the ABB LV drives ACS350, ACH550, ACS550 and ACS800* drive series. With the SEDG-01 module it is possible to build a gateway between DeviceNet fieldbus and Ethernet network.

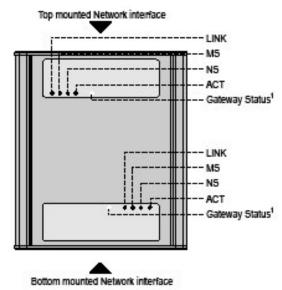
Note: SEDG-01 gateway does not need to be added to the scan list. SEDG-01 operates on CIP messaging and does not need to be added to scan list to operate.

Hardware Installation

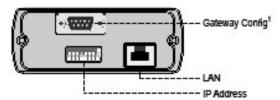
The Ethernet interface can be either top or bottom mounted. Both options are illustrated below.



• Top Mounted Interface



• Front View



• Bottom Mounted Interface

LAN Connector Pinout

Pin	Signal
1	TD+
2	TD-
3	RD+
4, 5, 7, 8	Termination
6	RD-



1. See Gateway Installation Sheet for further information

Ethernet Status LEDs

LED	State	Indication		
LINK	Green	Link OK		
	Off	Link not OK		
S	Green	Normal operation		

	Green, flashing	Stand-by, not yet configured			
	Red	Major fault, unrecoverable			
	Red, flashing	Minor fault, recoverable			
	Alt. Red/Green	Hardware self test			
NS	Green	EtherNet/IP connection established			
	Green, flashing	No EtherNet/IP connections			
	Red	Duplicate IP address			
	Red, flashing	EtherNet/IP Connection Timeout			
	Alt. Red/Green	Hardware self test			
	Off	No power or no IP address set			
ACT	Green	Receiving or sending packet			

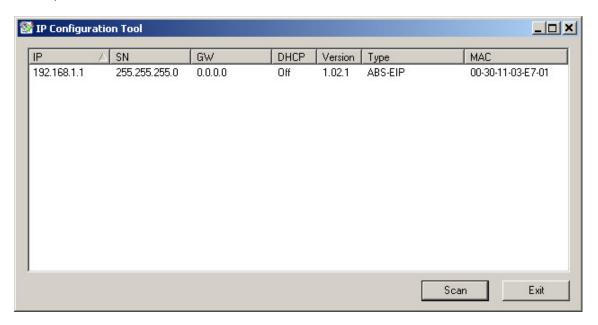
IP Address settings with switches or ABB IP configuration tool

The onboard switches can be used to set the IP address in the range 192.168.1.1 ... 192.168.1.254 (Subnet address 255.255.255.0). If another IP series should be used, all switches should be in OFF position. The value will then be read from the internal configuration file. SEDG-01 has also built in web page and setting for IP address can be done via web page. Example for web page configuration. Set IP address 192.168.1.2 and mask 255.255.255.0 for your computer. Then set up Sw 8 ON position (SEDG-01 has then address 192.168.1.1). Open your web browser ad type in address field 192.168.1.1. It is possible to change IP settings, see status of DeviceNet nodes etc.

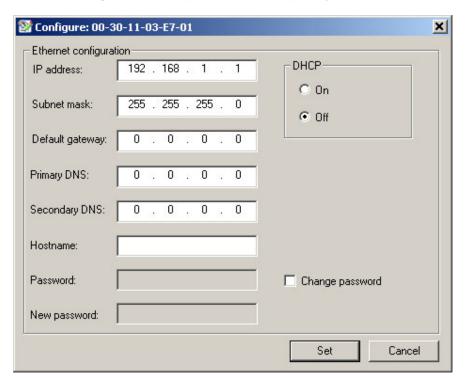
Sw. 1	Sw. 3	Sw. 4	Sw. 5	Sw. 6	Sw. 7	Sw. 8	IP Address
OFF	(Set by software)						
OFF	OFF	OFF	OFF	OFF	OFF	ON	192.168.1.1
OFF	OFF	OFF	OFF	OFF	ON	OFF	192.168.1.2
ON	ON	ON	ON	ON	ON	OFF	192.168.1.254
ON	(Not valid)						

Programming IP address with ABB IP Configuration tool

Ethernet MAC ID is found from the nameplate of SEDG-01 (backside), and the IP address is possible to change with ABB IP configuration tool (Available from www.abb.com/drives. Select Drive PC Tools and select Drive-Browser).



Doubleclick on top of the row and you are able to modify settings.



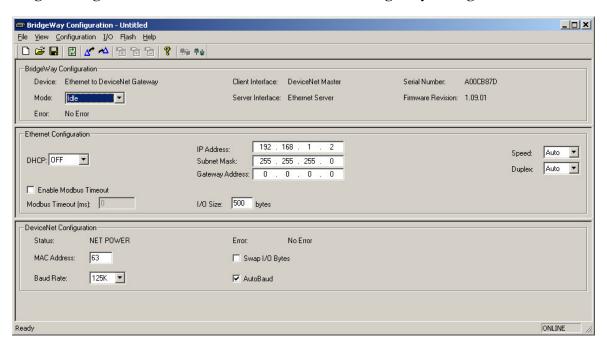


Programming IP address with web browser interface

Mac ID address

SEDG-01 has Mac ID address 63 and Baud Rate 125k as default. Any new node entering the DeviceNet network without the node address pre-programmed will be at node 63. It is recommend that node 63 is open for new devices. To change the default Mac ID address, Null modem cable and serial port on PC is required. Using BWConfig software (BridgeWay configuration tool) tool (Available from www.abb.com/drives. Select Drive PC Tools and select DriveBrowser) it is possible to change Mac ID, Baud rate and IP address of SEDG-01.

Programming IP address, Mac ID, Baud rate etc with BridgeWay Configuration tool



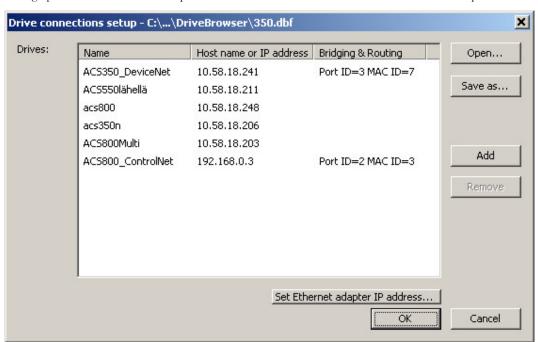
Accessories Checklist

The following items are required for installation:

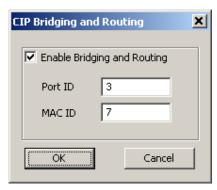
- ABB IP config. tool (not included) Available from <u>www.abb.com/drives</u>. Select Drive PC Tools and select DriveBrowser
- Null modem cable (included, needed if DeviceNet MAC address of the module has to be programmed)
- BridgeWay configuration tool (not included, For DriveBrowser usage needed if DeviceNet MAC address of the module has to be programmed) Available from www.abb.com/drives. Select Drive PC Tools and select DriveBrowser
- · EDS-file are available from www.abb.com/drives. Select Drive PC Tools and select DriveBrowser
- Suitable LAN cable

Installation and Startup Summary

- 1. Connect the gateway to the network.
- Select an IP address for the Ethernet interface of the gateway (Contact your network administrator for more information).
- **3.** If required, connect a PC to the gateway via null modem cable to change MAC address (If MacID 63 is not suitable, use BWConfig tool to do the setup).
- 4. Power up and (if required) configure the gateway
- **5.** If required, install the .EDS files in the Communication network configuration tool.
- 6. Setting up for DriveBrowser. Start up DriveBrowser. Select from Edit-> Drive connections setup



7. Click Add. Type Name, Type IP address for the SEDG-01, Click on Bridging&Routing,



- **8**. SEDG-01 uses Port ID 3 always!. Program the MAC ID to the DeviceNet MAC ID for the drive that Drive-Broswer will communicate too. Click OK.
- **9.** If you want to use DriveBrowser with an ACH550, ACS550 or ACS800 and the drive is programmed to use an instance other then 100/101 you have to manually copy some ini files from installation folder of DriveBrowser. These files are found from c:\Program

Files\DriveWare\DriveBrowser\\IniFilesForControlNetDeviceNetGateways.There are separate folders for each drive type.

Here is example how to use it. If you for example want to use ACS550 with assembly I/O instances 102/103 you have to manually copy file 0x201.ini from c:\Program

Files\DriveWare\DriveBrowser\IniFilesForControlNetDeviceNetGateways\ACS550\WorksWithInstance102 _103 folder and paste it to c:\Program Files\DriveBrowser

If you want to use original ini file it can be found also from c:\Program Files\DriveWare\DriveBrowser\IniFilesForControlNetDeviceNetGateways\ACS550\Original_WorksAlsoWit hInstance100_101.

Note!! These manual adjustment have to done only if you use ABB Drives profile with I/O Assembly instances 102&103, or ODVA AC/DC profile with I/O Assembly 20&70, or ODVA AC/DC profile with I/O Assembly 21&71 or ODVA AC/DC profile with I/O Assembly 121&171,

10. DriveBrowser control panel is disabled with SEDG-01.

Support

Documentation and software downloads are available at the ABB website, 'www.abb.com/drives'. DriveBrowser manual is available from www.abb.com/drives. Click on Drive PC Tools link.

Physical size of SECG-01 gateway is (10,5x13,5X4,2) cm (4,1X5,3X1,6) inches

SECG-01 input power is 24 VDC, 300mA

DeviceNet power requirements (Example 20mA typical, 50mA max from network)