

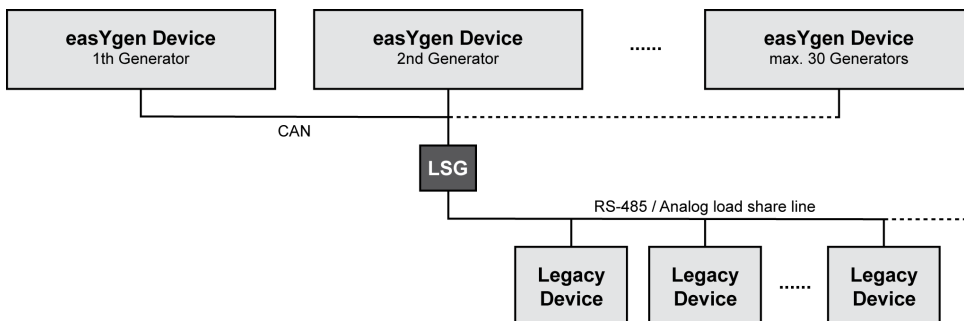


## Load Share Gateway (LSG)

### DESCRIPTION

The Load Share Gateway (LSG) is a next generation communication converter specifically designed to operate the easYgen-2000 / easYgen-3000 Series and legacy devices (RS-485 bus or analog load share line coupled) in one single load share network.

#### Example:



### FEATURES

- Easy and direct configuration via easYgen
- Converts CAN bus loadshare information into RS-485 data
- Converts CAN bus loadshare information to analog load share line
- Several analog load share line voltage ranges are selectable for a variety of analog load share devices
- Status LEDs for CAN & RS-485 communication are present
- Robust industrial grade metal housing
- LSG is visualized on the sequencing display screens on the easYgen

#### Technical requirements

The Load Share Gateway (LSG) works only in combination with:

- easYgen-3100/3200 (Package P2 – Software Version 1.12xx & 1.13xx)
- easYgen-3100/3200 (Software Version 1.15xx or higher)
- easYgen-3400/3500 (Software Version 1.17xx or higher)
- easYgen-2000 Series

- Ideal communication converter between easYgen-2000/3000 and legacy analog load share networks
- Easy and direct configuration via easYgen-2000/3000
- Preconfigured operating modes for legacy Woodward and third party devices
- Robust industrial grade aluminium housing
- CAN-to-RS-485 load share line gateway
- CAN-to-analog load share line gateway
- CE marked

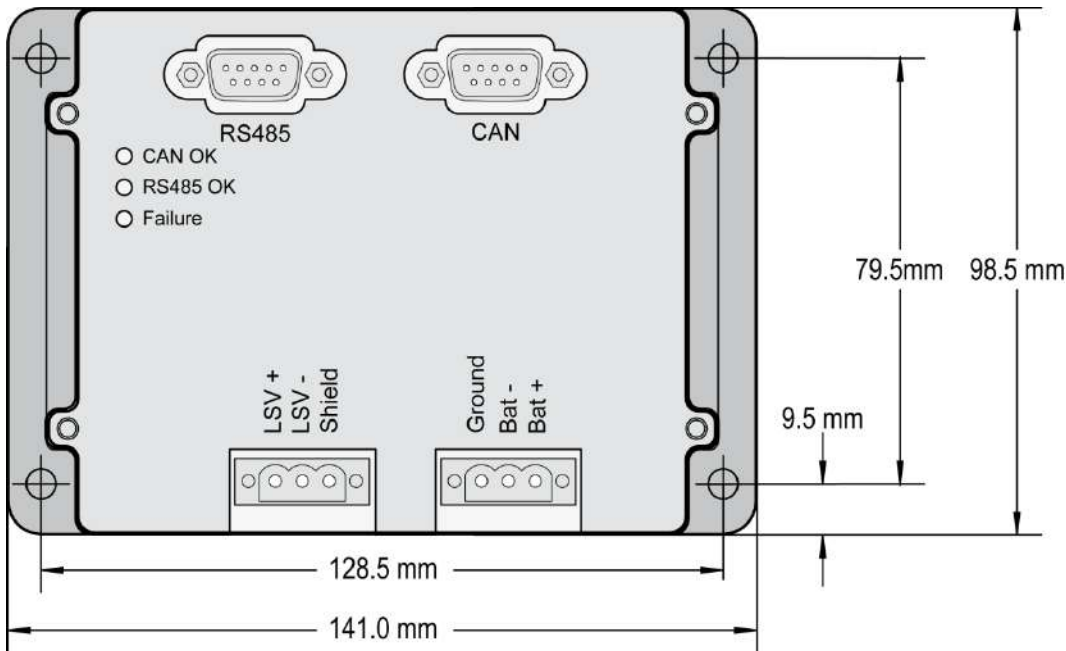
# SPECIFICATIONS

Power supply.....12/24 Vdc (8 to 40 Vdc)  
 Intrinsic consumption .....max. 3 W  
 Ambient temperature (operation).....-20 to 70 °C / -4 to 158 °F  
 Ambient temperature (storage).....-30 to 80 °C / -22 to 176 °F  
 Ambient humidity.....60°C, 95% RH non-condensing, 5 days  
 .....IEC 60068-2-30, Test Db

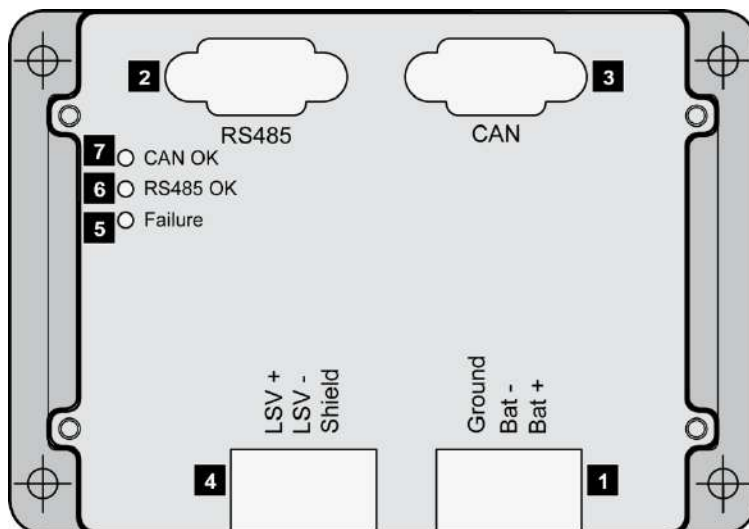
**Housing**  
 Type .....Aluminium  
 Dimensions WxHxD ..... 141 × 98.5 × 21 mm  
 Connection..... screw/plug terminals 2.5 mm<sup>2</sup>  
 Protection system ..... IP20  
 Weight.....approx. 280 g  
**Disturbance test (CE)** ..... tested according to applicable EN guidelines

# DIMENSIONS

## Metal housing



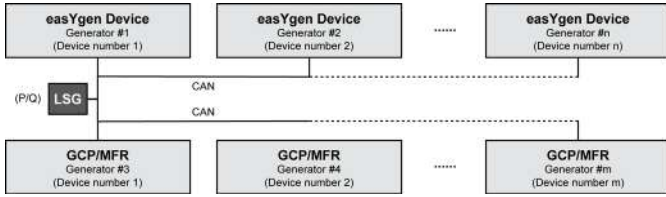
# TERMINAL DIAGRAM



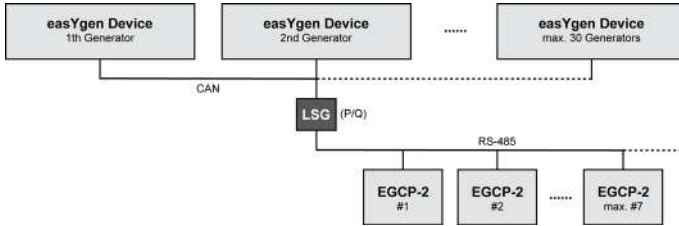
1. Power terminal block socket
2. RS-485 connector
3. CAN connector
4. Analog terminal block socket
5. Error indication LED
6. RS-485 / GCP/MFR CAN / Analog Status Indicator
7. easYgen (CAN) Communication Status LED

# APPLICATIONS

## easYgen connected to GCP/MFR (CAN)



## easYgen connected to EGCP-2 (CAN/RS-485)



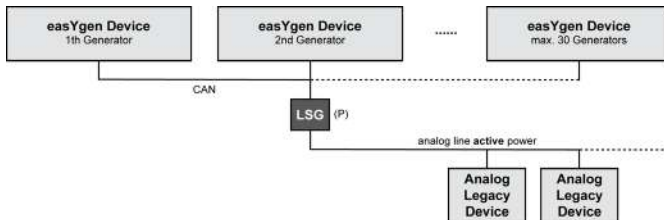
## easYgen connected to legacy device (CAN/Analog)

There are two application scenarios possible:

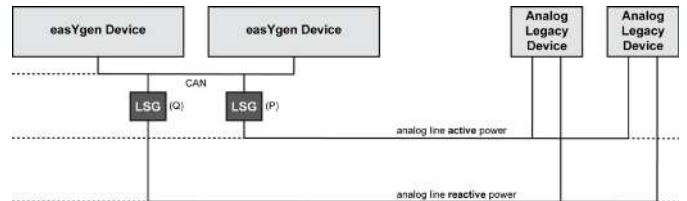
- Examples A shows the applications with one LSG for all easYgen devices
- Examples B shows the applications with one LSG for each easYgen devices

### Example A

Active power loadshare

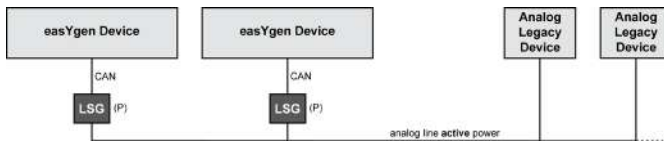


Active and reactive power loadshare

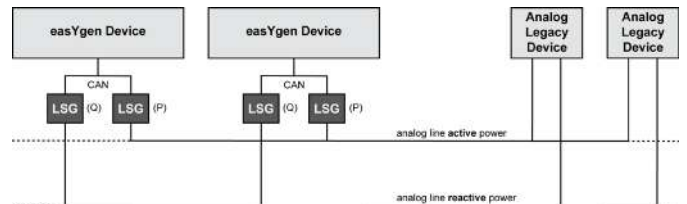


### Example B

Active power loadshare



Active and reactive power loadshare



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37451B - 2011/04/Stuttgart

# FEATURES OVERVIEW

	Model	Load Share Gateway (LSG)
<b>Supported devices</b>		
Woodward EGCP-2		RS-485 (P & Q) <sup>1</sup>
Woodward SPM-D		R <sup>2</sup> = 4.99k P <sup>3</sup> = 0 - 4V (0 to 100%) Q <sup>4</sup> = 0 - 5V (-85 to +85%)
MFR 15		R = 4.99k P = 0 - 4V (0 to 100%)
Woodward 2301 A		R = 54.90k P = 0 - 3V (0 to 100%)
Caterpillar LSM		R = 25.00k P = 0 - 3V (0 to 100%)
Cummins PCC 3100; PCC 3200; PCC 3201; PCC 3300		R = 5.00k P = 0 - 2.5V (-14.1 to +121.9%) Q = 0 - 2.5V (-16.7 to +125.3%)
POW-R-CON		R = 20.67k P = 0 - 5V (0 to 100%)
Prepared <sup>5</sup>		R = 25.00k P = -5 - +5V (0 to 100%)
Prepared <sup>5</sup>		R = 25.00k P = 0 - 7V (0 to 100%)
GCP/MFR		CAN (P & Q) <sup>1</sup> - easYgens and GCP/MFR share the same CAN bus
<b>I/Os</b>		
CAN bus load share line		✓
Analog load share line		✓
RS-485 load share line		✓
LED for CAN Status		✓
LED for RS485/Analog line Status		✓
LED for bus failure visualization		✓
<b>Listings/Approvals</b>		
CE Marked		✓
<b>Part Numbers</b>		
Active power load share gateway (P) <sup>3</sup>	P/N 8444-	1075
Re-active power load share gateway (Q) <sup>4</sup>	P/N 8444-	1074

<sup>1</sup> Operation mode supports one LSG device. This single device is able to share P and Q.

<sup>2</sup> R = Resistance

<sup>3</sup> P = Active power load share line range

<sup>4</sup> Q = Reactive power load share line range

<sup>5</sup> For Load Share devices that meet the specifications shown in the table above.