

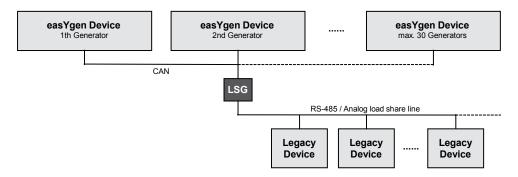


# Load Share Gateway (LSG)

#### 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 configuration directly via the 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 communciation 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 the easYgen-3000 Series (Package P2) and the entire easYgen-2000 Series.

- Ideal communication converter between easYgen-2000/3000 and legacy analog load share networks
- Easy configuration directly via easYgen 2000 and 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

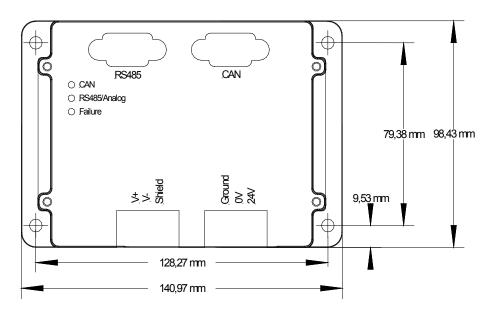
# **SPECIFICATIONS**

Power supply	12/24 Vdc (8 to 40 Vdc)
	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 humidity6	60°C, 95% RH non-condensing, 5 days
	IEC 60068-2-30, Test Db

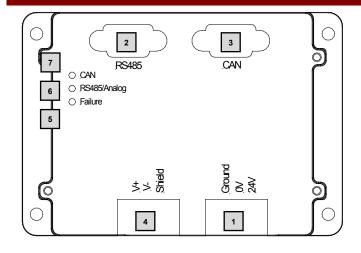
Housing		
Туре		Aluminium
Dimensions	WxHxD	141 × 98.5 × 21 mm
Connection		screw/plug terminals 2.5 mm <sup>2</sup>
Protection system		IP20
Weight		approx. 280 g
		ted according to applicable EN guidelines

# **DIMENSIONS**

### **Metal housing**



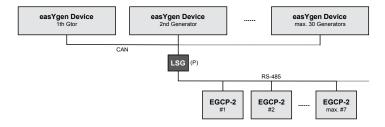
# **TERMINAL DIAGRAM**



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

LSG - wiring diagram

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

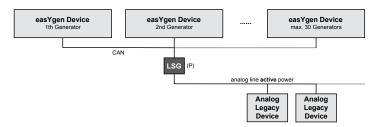


#### easYgen connected to legacy device (CAN/Analog)

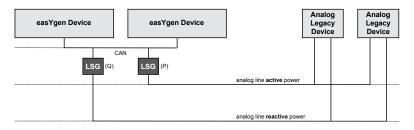
There are two application scenarios possible:

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

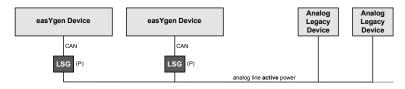
#### Example A: Active power loadshare



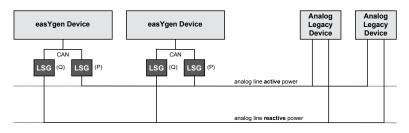
#### Example A: Active and reactive power loadshare



#### Example B: Active power loadshare



#### Example B: Active and reactive power loadshare





#### International

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#### **Distributors & Service**

Woodward has an international network of distributors and service facilities. For your nearest representative, call the Fort Collins plant or see the Worldwide Directory on our website.

#### www.woodward.com/power

For more information contact:

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## **FEATURES OVERVIEW**

	Model	Load Share Gateway (LSG)
	IVIOUEI	Load Share Galeway (LSG)
Supported devices		
Woodward EGCP-2		RS-485
Woodward SPM-D		$\mathbf{R}^{*1} = 4.99 \mathbf{k}$
		$\mathbf{P}^{*2} = 0 - 4V \text{ (0 to 100\%)}$
1000		$\mathbf{Q}^{*3} = 0 - 5V (-85 \text{ to } +85\%)$
MFR 15		$\mathbf{R} = 4.99k$
		<b>P</b> = 0 – 4V (0 to 100%)
Woodward 2301 A		<b>R</b> = 54.90k
		<b>P</b> = 0 - 3V (0 to 100%)
Caterpillar LSM		R = 25.00k
g :		<b>P</b> = 0 - 3V (0 to 100%)
Cummins PCC 3100; PCC 3200; PCC 3201; PCC 3300		R = 5.00k
rec 3100, rec 3200, rec 3201, rec 3300		P = 0 - 2.5V (-14.1  to  +121.9%)
DOW D. COM		$\mathbf{Q} = 0 - 2.5 \text{V} (-16.7 \text{ to } +125.3\%)$ $\mathbf{R} = 20.67 \text{k}$
POW-R-CON		
Prepared* <sup>4</sup>		$\mathbf{P} = 0 - 5V (0 \text{ to } 100\%)$ $\mathbf{R} = 25.00k$
riepared.		$\mathbf{P} = -5 - +5 \text{V} \text{ (0 to 100\%)}$
Prepared* <sup>4</sup>		<b>R</b> = 25.00k
Prepared.		$\mathbf{P} = 0 - 7V (0 \text{ to } 100\%)$
110		I - 0 - / V (0 to 100%)
I/Os		
CAN bus load share line		<b>√</b>
Analog load share line		<b>√</b>
RS-485 load share line		<b>√</b>
LED for CAN Status		✓
LED for RS485/Analog line Status		✓
LED for bus failure visualization		<b>√</b>
Listings/Approvals		
CE Marked		✓
Part Numbers		
Active power load share gateway (P)*2	P/N 8444-	1075
Re-active power load share gateway (Q)*3	P/N 8444-	1074

<sup>\* &</sup>lt;sup>1</sup> R = Resistance \* <sup>2</sup> P = Active power load share line range \* <sup>3</sup> Q = Reactive power load share line range

<sup>\* &</sup>lt;sup>4</sup> For Load Share devices that meet the specifications shown in the table above.