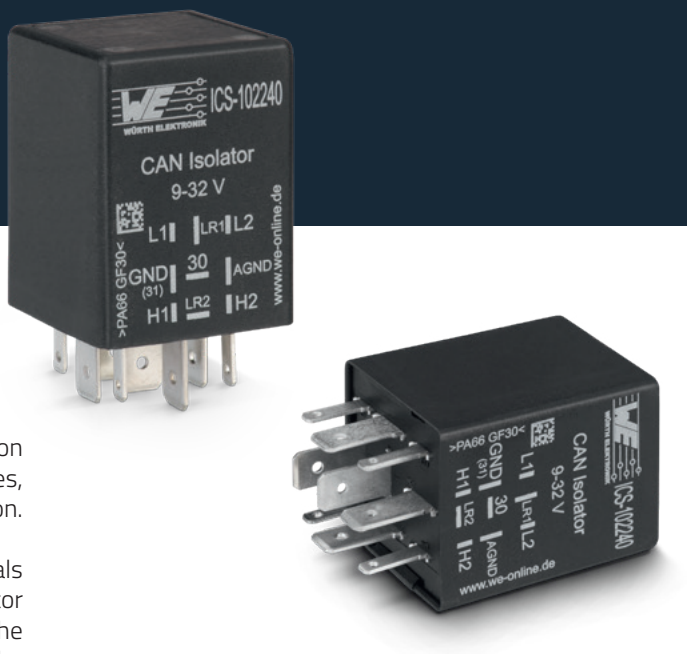
CAN ISOLATOR

Controllers - Add-ons



The CAN Isolator allows you to ensure clean communication between two or more ECUs with different voltage ranges, or to isolate a particular ECU by providing galvanic isolation.

It can also be used as a repeater to amplify CAN bus signals and offers the possibility of adding a 120 Ohm resistor to each of its ports by external wiring. This allows the module to act as the end point of a CAN network, or if the CAN Isolator is implemented in an existing line, it splits it into two physically terminated CAN bus lines that are still bridged together.

Technical data

General information	
Connector	9 Pins DIN / relay shape
Dimensions	30 x 30 x 40 mm
Housing material	PA66 GF30
Operating temperature	-40 °C to 85 °C
Storage temperature	-40 °C to 85 °C
Ingress protection	IP53
Operating voltage	9 to 30 V DC
Pre-fusing	1 V
Current consumption	< 30 mA @ 24 V supply

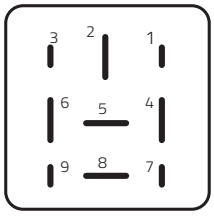
CAN bus	
acc. ISO 11898-2	High speed
Direction	Bidirectional data exchange possible
Baud rate	10 kBit/s to 1000 kBit/s

Inputs / outputs		
2	CAN buses	Galvanic isolation between two ports
2	CAN termination	Wiring connection of 120 Ω on each CAN port possible
2	Isolated ground	The two ground lines are split inside the module, do not connect them together.

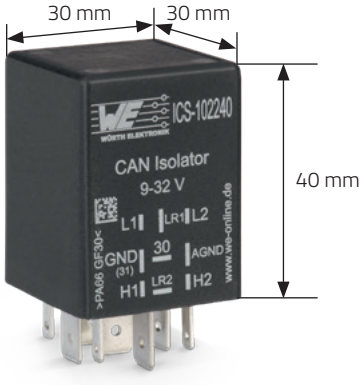
Pin assignment

Pin	Description	Function
1	L2	CAN Low bus 2
2	LR1	CAN term (short to L1 to activate)
3	L1	CAN Low bus 1
4	GND 2	Ground for bus 2
5	KL30	Vsupply
6	KL31 / GND1	Ground for bus 1 / Supply GND
7	H2	CAN High bus 2
8	LR2	CAN term (short to L2 to activate)
9	H1	CAN High bus 1

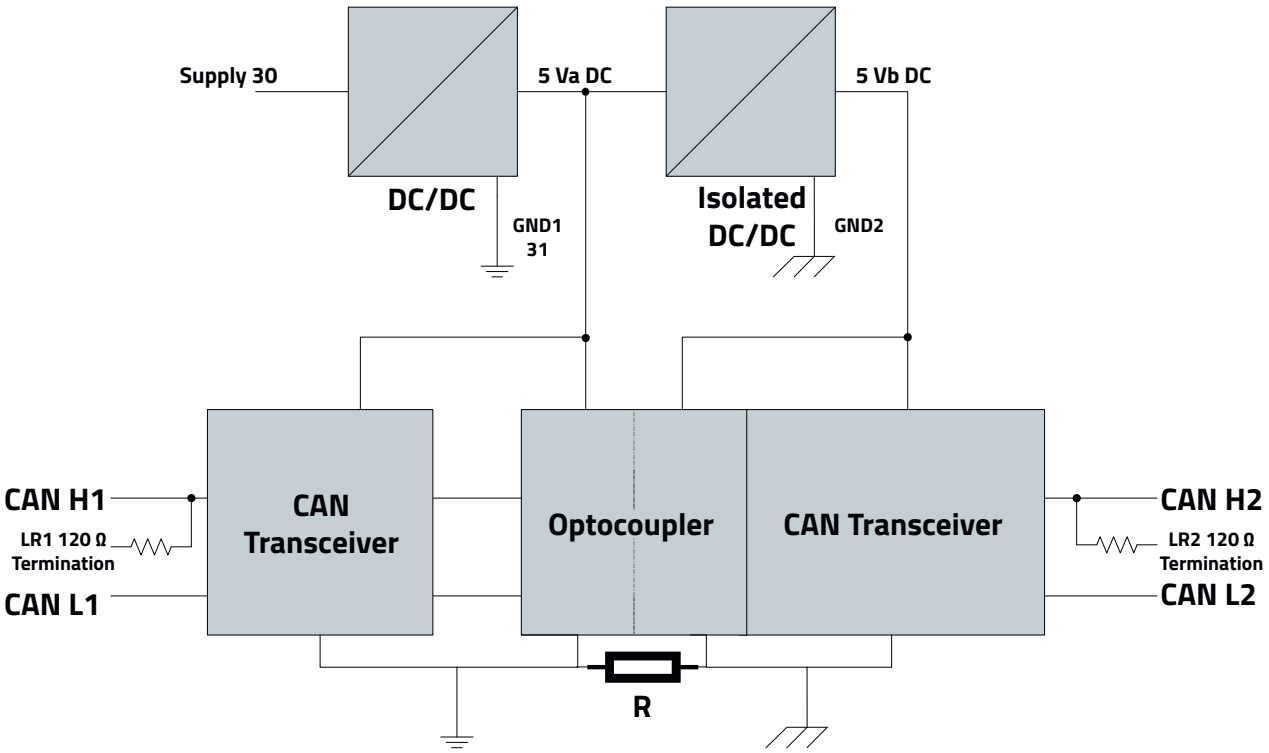
Bottom View



Dimensions



Hardware map



Order information

Available references	Part number
CAN Isolator (10 kΩ)	ICS-102240
CAN Isolator (56 kΩ)	ICS-104776
CAN Isolator (1 MΩ)	ICS-104984
9 pins IP65 socket	ICS-102300
9 pins standard socket	X02783

This item is a standard product, please consider the relevant datasheet notes. The user is responsible for the product's functionality in its purposed system environment. Technical content may be modified and changed by Wurth Elektronik ICS GmbH & Co. KG without any notice.

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