

# CAN-Repeater

## Passive I- or Y-Repeater for CAN

### Expansion of the CAN Network

- Connects 2 or 3 CAN networks
- Improves the load capacity of the CAN bus with participants
- Available with or without electrical isolation

### Industry-Suitable Design

- CAN interface according to ISO 11898-2, data bit rates up to 1 Mbit/s
- Operating voltage range: 8 V ... 30 V
- Compact housing for DIN-EN carrier rail mounting (TS 35)

### Arbitration

- Fast logic ensures complete transparency and flawless arbitration of CAN objects in all connected networks



Each CAN interface of the CAN-Repeater comes with an internal terminating resistor of 120 Ω.

### Line Length

The total expansion and maximum bit rate of the complex CAN network is determined from the sum of the maximum lengths of subnetworks and Repeaters (eL). Only one repeater can be used per network.

### Power Supply

The CAN-Repeater is supplied with an external voltage in the range of 8 V ... 30 V.

### Arbitration

A total transparency and the perfect arbitration of the CAN objects in all connected networks is guaranteed by the integrated fast logic.

### Customization on Request

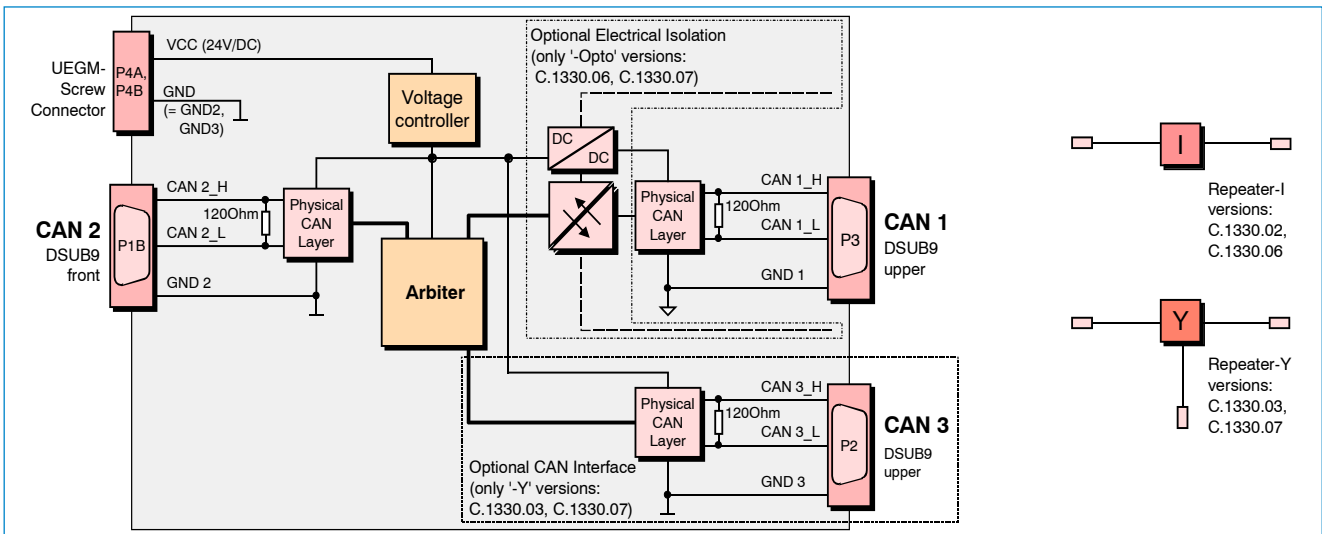
Customized options are available for customized series production in reasonable quantities. Please contact our sales team for detailed information.

### I- or Y-Repeater

The CAN-Repeater-I can be used to improve the participant capacity of CAN and the CAN-Repeater-Y can be used to establish a branch from one to two CAN lines. Optionally, the CAN-Repeaters with '-Opto' design can insert an electrical isolation.

### Physical Layer

All CAN interfaces of the CAN-Repeaters comply with ISO 11898. Each CAN-Repeater is available without electrical isolation or with an electrically insulated CAN1 interface. The maximum transfer rate is 1 Mbit/s. The bit timing must be the same on all CAN networks.



### Technical Specifications:

CAN Bus:	
Number	Repeater-I versions: 2 CAN interfaces Repeater-Y versions: 3 CAN interfaces
CAN interface	Differential, ISO 11898, Bit rate up to 1 Mbit/s
Electrical isolation	None, Except CAN 1 of '-Opto' versions, C.1330.06, C.1330.07 only: CAN 1 isolated by optocouplers, Isolation voltage: 1kV DC @ 1s
Effective line length (eL) (for constant CAN bit rate)	Repeater delay shortens max. line length by max. 14 m
General:	
Module operating voltage	Nominal: 24 V DC, Range: 8 V ... 30 V
Ambient temperature	0 °C ... +50 °C

General (Continued):	
Relative humidity	Max. 90 % (non-condensing)
Dimensions	25 mm x 85 mm x 83 mm
Connectors	CAN: 1x DSUB9 (plug) per CAN channel VCC: 3-pin UEGM screw connector
Order Information:	
Hardware	Order No.
Without electrical isolation:	
CAN-Repeater-I	2x CAN C.1330.02
CAN-Repeater-Y	3x CAN C.1330.03
With electrical isolation of interface CAN 1:	
CAN-Repeater-I-Opto	2x CAN C.1330.06
CAN-Repeater-Y-Opto	3x CAN C.1330.07