CAN Repeater
Passive I- or Y-Repeater for CAN

- linking 2 or 3 CAN networks
- with or without electrical isolation
- compact hatrail module

I- or Y- Repeater

The I-Repeater can be used to improve the participant capacity of the CAN bus or to insert an electrical isolation (only possible in design '-Opto'). The Y-Repeater makes a branch from one to two CAN lines.

Physical Layer

All CAN interfaces of the repeaters comply with ISO 11898. Each Repeater is available without electrical isolation or with an electrically insulated interface.
The maximum transfer rate is 1 Mbit/s. The bit timing has to be the same at all connections. Each CAN interface has a terminating impedance of 120 ohm in the repeater.
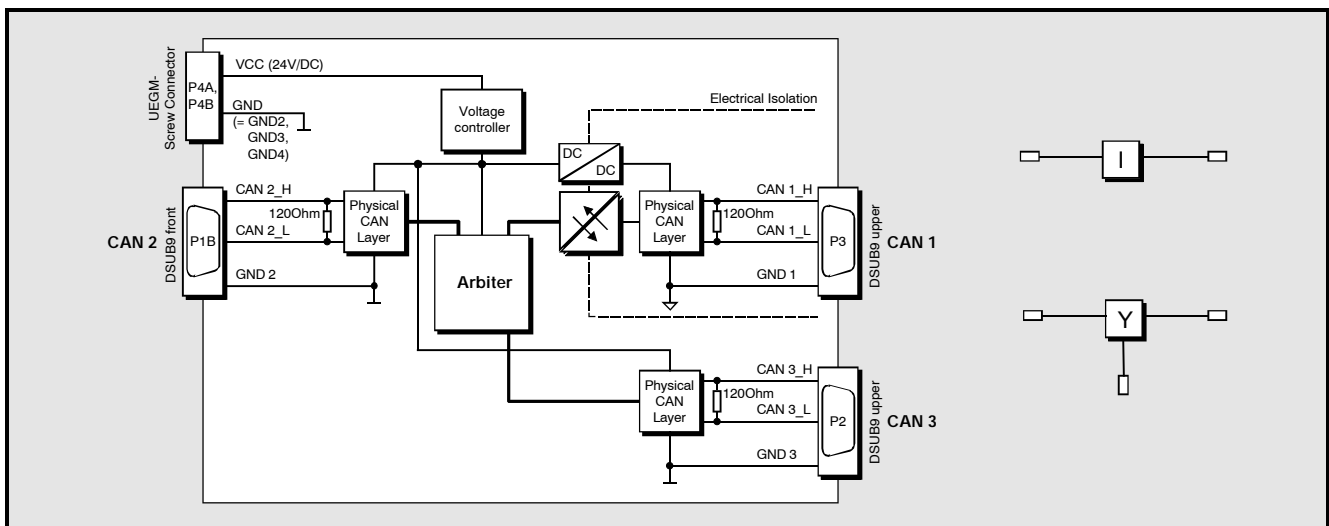
Line Length

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 fed by an external voltage in the area 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.

Technical Specifications:

CAN bus:	
CAN interface:	differential, ISO 11898, bit rate up to 1 Mbit/s
Electrical isolation:	only in '-Opto' design, CAN 1 isolated by optocouplers
Effective line length (eL): (for constant CAN bit rate)	repeater delay shortens max. line length by max. 14 m

General:	
Ambient temperature:	0...50 ˚C
Humidity:	max. 90 %, non-condensing
Dimensions: (wide x high x deep)	25 x 85 x 83 mm
Module operating voltage:	nominal 24 V(DC), range: 8 V...30 V
Connectors:	CAN: each 9-pin DSUB (male) VCC: 3-pin UEGM screw connector

Order information:		
Designation		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
CAN-Repeater-ME	English user's manual	C.1330.21