



Data Sheet

## MDILink QX035 GMSL2 4EP

### Measurement Data Interface

**4 channel FPGA based measurement data interface with GMSL2 serializer and deserializer for lossless raw data acquisition in ADAS and AD environments.**

With the MDILink you get a SerDes measurement data converter that allows a smooth transition from the development stage and validation results to series production. MDILink is part of the b-plus AVETO Toolbox, see [www.b-plus.com](http://www.b-plus.com) for more details.

### Highlights

- 4 channel GMSL2
- Time synchronization IEEE 1588 PTP and gPTP
- 2x 10 Gb Ethernet downstream ports
- Modular design
- Flexible FPGA SoC architecture
- Configuration via web interface
- Optimized for high bandwidth data throughput
- Robust design for rough environment



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## Features

### Interfaces

GMSL2	4x serial link in RX	MAX9295A
Connector	Fakra	
	power over coax	external supply
Backchannel	I2C backchannel communication and logging	
Internal	MIPI CSI2, 4 channel	
Downstream	2x 10Gb Ethernet, M12 connector	configurable channel assignment
Management	1Gb Ethernet, M12 connector	configuration via website
time synchronization	IEEE 1588 PTP and 802.1AS gPTP	
Data-format	ASAM CMP* b-plus RX-API	
Architecture	FPGA SoC	

## Specifications

### Electrical Specification

Supply Voltage	wide range 8 - 32 V	6,5 V crank safe
Power consumption	typ. 15 W	Up to 25 W
	external power on (ignition) control	
Power over Coax	6 – 15 V max. 300 mA	external supply, separate for channel 0 and channel 1

### Environment Specification

operation Temperature	-25 °C to +70 °C
non operation	-40 °C to +85 °C
Relative Air Humidity	maximum 90 %, non-condensing

### Mechanical Specification

Dimensions	159,7 mm (W) x 140 mm (D) x 38 mm (H)	mounting, without connectors
Weight	approx. 0,8 kg	

**Certification** CE, RoHS, REACH

## Order Information

Name	Part Number	Description
MDILink QX035 2GCE2GCE-2	B21671-MDI-001-0006	Measurement Data Interface (LVDS, SerDes) 4x GMSL2 to 2x 10GbE, including cables for power and Ethernet

## Order Information Accessoires

Name	Part Number	Description
Network cable M12	2001931	Network cable M12-X male plug 8-pin to RJ45 2 m
Power Cable	2001932	Open end power cable w/ M12-A female plug 2 m, 5 wires, 0.75 mm