

MDILink QX035

Multi-Channel LVDS / Serial LVDS to dual 10GbE Measurement Interface

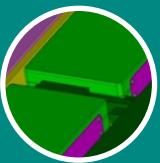
Along with **increasing sensor data rates (e.g. camera and radar data)**, the challenges of loss-free acquisition of raw data are also rising. The b-plus solution MDILink is located on the sensor end and enables **lossless decoupling of raw data** with time-stamps from a serial link/LVDS camera interface like CSI2, FPD or GMSL2.

For this purpose, the b-plus MDILink offers corresponding high-performance interfaces. The **logging of new and high-resolution sensor data** supports the further development of algorithms and thus supports the development of better ECU software. For a sensor manufacturer, this means **faster positioning on the market**.

In addition to **flexible programming**, the **hardware is also available in a modular design**. In addition to the standard variants, **customer-specific adaptations** can be implemented very effectively. Especially in the first prototyping developments you need a fast solution to realize projects faster.



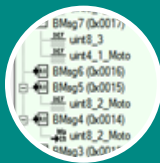
Highlights



Modular design



Designed for high bandwidth data



flexible programming



Robust design for rough environment



time synchronization
IEEE1588
802.1AS

Technical Information MDILink GMSL QX035-1GCT1FGT-2S

Features

- 2x GMSL2 Link in
- 2x GMSL2 Link out TAP mode
- GMSL2 MAX9295A / MAX9296A SerDes
- High performance SoC architecture
- 2GB RAM, 2GB logic RAM, 512Mb Flash
- Modular concept for easy sensor adaption
- Up to 2x 10GbE download ports
- IEEE1588 802.1AS-2020 time synchronization
- robust and compact housing
- API for integration in 3rd party Framework¹
- 1GbE MGNT port for simple configuration
- Internal configuration space
- I2C backchannel communication logging
- Power over Coax (external supply)
- Data Integrity monitoring
- AVETO ready

Environment specification

Operating: -20 to 70°C tbd.

Non-Operating: -40 ~ 85°C

Humidity: 10% to 90%, non-condensing

Mechanical Dimensions (incl. mounting)

L x W x H[mm]: 159,7x140x38

IP20 (FAKRA connector version)

Connector Specification

M12 Ethernet connectors for 1GbE / 10GbE

M12 Connector for MDILink power, PoC supply

FAKRA Coax Connector (project specific)

Power Supply

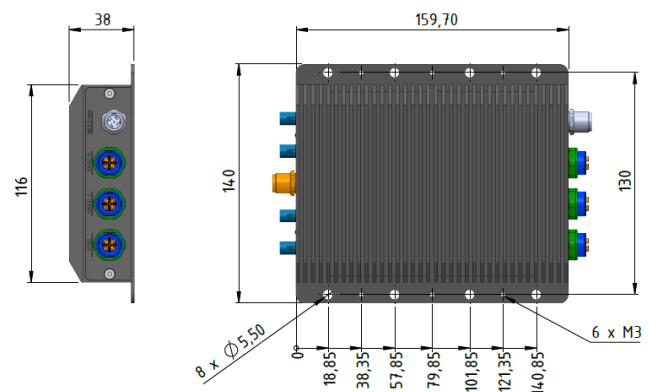
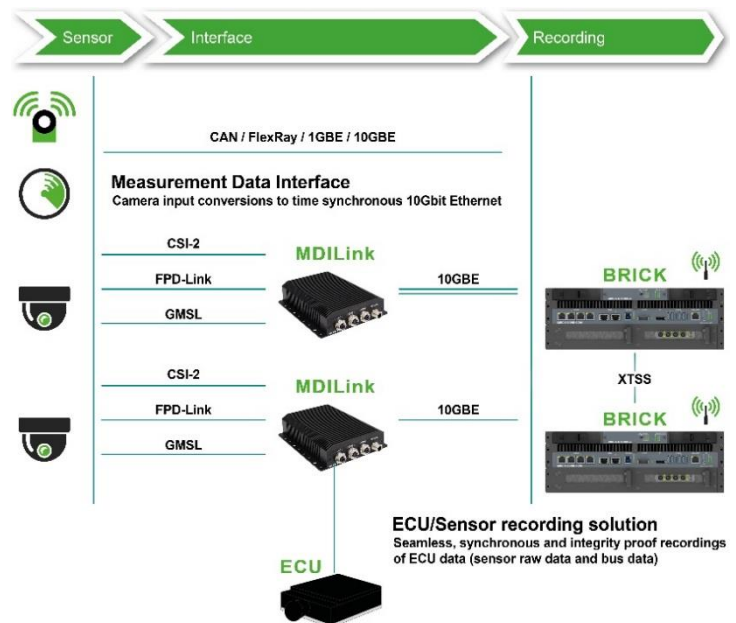
6,5V to 32V, crank-safe

Power consumption typ. 20W, max 25W.

external power on (ignition) control

PoC external supply 6 to 15V max. 300mA depending on Sensor)

¹ project based software adoption needed



Name

MDILink GMSL QX035-1GCT1GCT-2S

Order-no.

B21671-MDI-001-0003

Description

Measurement Data Interface with flexible Interface configuration (LVDS, SerDes)
 2x GMSL2 Link TAP to 10GbE
 Including all cables for power and ethernet