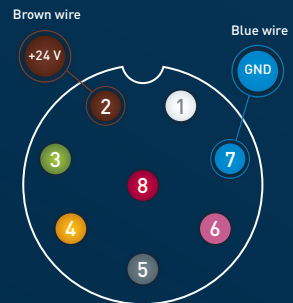


# AIQ CORE TORQUE DATA SHEET



## PIN ASSIGNMENT (DEVICE SIDE)

1	Analog output [4 ... 20 mA]	torque
2	+24 V DC	
3	Ethernet TXN	
4	Ethernet TXP	
5	Ethernet RXN	
6	Ethernet RXP	
7	GND [ground]	
8	Digital output	Speed pulse



## ANALYTICS AND FUNCTIONS

- Torque monitoring
- Process improvement by detecting harmful conditions
- Calculation of remaining useful life of components, such as bearings, gearing and oil
- Event monitoring
- Integration into PLC via OPC UA (alarms, KPIs ...)
- Component monitoring (frequency-selective)
- Maintenance and support

## GENERAL



- IP67 protection class
- CE/EAC certification
- Ethernet (option for online mode)
- Bluetooth (option for local mode)
- Operating voltage 24 V DC
- Dimensions 70 × 70 × 35 mm

## TEMPERATURE MEASUREMENT



- PT-1000 oil sump temperature measurement
- Connection to PLC
- Temperature range: -40° C ... +135° C

## SPEED MEASUREMENT



- Hall sensor detects teeth of one of the gears
- Connection to PLC
- Digital output pin 8 / pulse signal
- High resolution

## VIBRATION MEASUREMENT



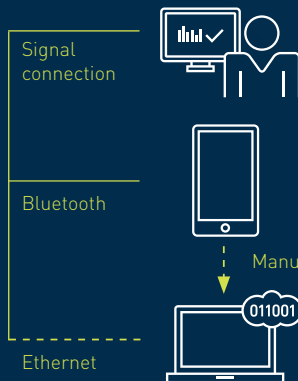
- 3-axis vibration sensor included
- Connection to PLC
- Measurement range: 1 Hz ... 6.3 kHz

## TORQUE MEASUREMENT



- Direct integrated torque measurement mechanically calibrated measuring point 99.7% accuracy
- Analog output pin 1

## USE CASES AND CONNECTIVITY



### OPTION 1

Offline mode: signal connection via OPC UA to customer control (PLC)

### OPTION 2

Local mode: Bluetooth connection to the smartphone with AIQ app

### OPTION 3

Online mode: ethernet connection to the AIQ portal

