



MGH Services: AIQ Retrofit Data Sheet

AIQ CORE DATA SHEET



PIN ASSIGNMENT (DEVICE SIDE)

1	Analog output (0 ... 20 mA)	Temperature
2	+24 V DC	
3	Analog output (4 ... 20 mA)	VRMS
4	Digital output 24 V 0.2 A	Gear unit status
5	Speedometer signal 24 V	Speed
6	Digital output 24 V 0.2 A	Oil temp. warning
7	GND	
8	Custom Input	



ANALYTICS AND FUNCTIONS

- Calculation of remaining oil life
- Operating temperature and warm-up notification
- Alarming (oil status pin 6, overall pin 4, digital)
- Imbalance monitoring
- Vibration KPIs (aRMS, vRMS, ...)
- Frequency-selective analytics (optional)
- Maintenance tasks and support
- Operating state (e.g. operation hours / start-up counter)

GENERAL

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

TEMPERATURE MEASUREMENT

- PT-1000 oil sump temperature measurement
- Connection to PLC
- Analog output pin 1 (0 ... 20 mA)
- Temperature range: -40° C ... +135° C

SPEED MEASUREMENT

- Hall sensor detects teeth of one of the gears
- Connection to PLC
- Digital output pin 5 / pulse signal
- High resolution

VIBRATION MEASUREMENT

- 3-axis vibration sensor included
- Connection to PLC
- Measurement range: 1 Hz ... 6.3 KHz
- Analog output pin 3 (4 ... 20 mA), VRMS (DIN 10816-3)

USE CASES AND CONNECTIVITY

OPTION 1



Offline mode: signal connection to customer control (PLC)

OPTION 2



Local mode: Bluetooth connection to smartphone AIQ app

OPTION 3



Online mode: Wi-Fi connection to AIQ inside / cloud-to-cloud

Manual data upload



