

TAD-IEPE

IEPE Sensor Amplifier

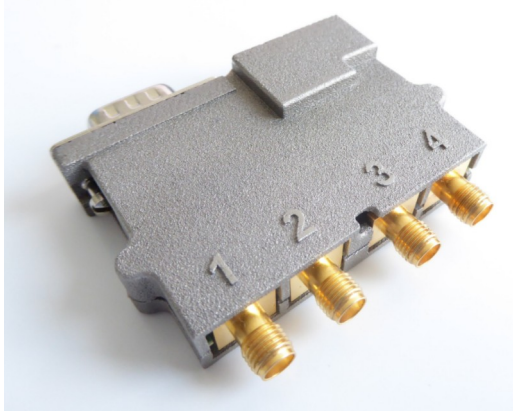


Figure 1: Top view

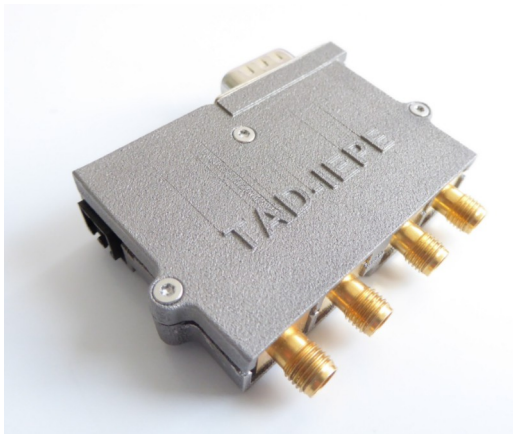
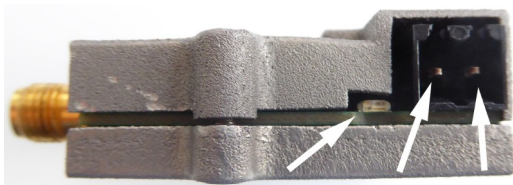


Figure 4: Bottom view



Power LED +24V GND

Figure 5: 24V Power supply

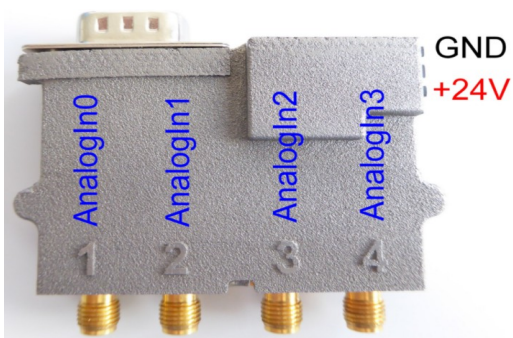


Figure 6: TAM register assignment with AN option module

The TAD-IEPE is an amplifier for IEPE sensors (**I**ntegrated **E**lectronics **P**iezo-**E**lectric). IEPE sensors are used for acceleration, force, and pressure.

The amplifier integrates high-pass and low-pass filtering.

The 24V power supply is internally isolated. Therefore it is permitted to use the same supply as for the drive logic supply.

For use with a Triamec servo drives the AN option module is required.

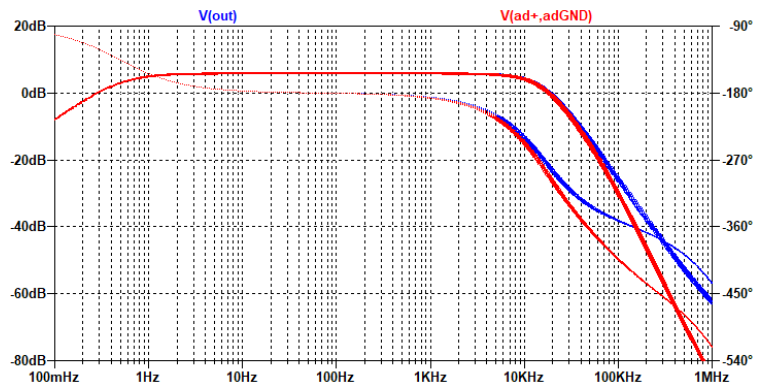


Figure 2: Filter transfer function of the amplifier without AN module (blue) and with AN module (red).

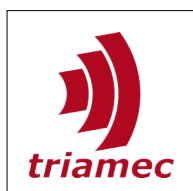
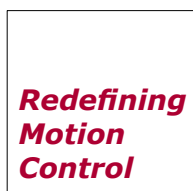


Figure 3:
TAD-IEPE mounted on Axis 0 of a TSDXXX-XX-ANXX

Specifications

	TAD-IEPE
Input Gain per Channel	-1.96 (inverting input)
Channels	4
Max Output per Channel	±10 V
Sensor Connector	SMA (center "+")
Power Connector	Weidmüller 1615670000 BL 3.50/02/180 SN BK BX
Drive Connector	D-Sub HD15 connector. Option module AN is required.
Operating Condition	0°C to +45°C (non condensing)
Power Input	18 - 36 VDC (nom. 24 V)
Power Consumption	Typ. 37 mA @ 24 V for 4 sensors max. 50 mA
Power Indicator	Green LED
Power Diagnostic	TAM Register AnalogIn4 nominal: 7.81 V
Sensor Supply	min. 18V, max. 22V 2.5mA constant current (typical open voltage 20.8V)
Recommended Sensor Signal Swing	±5 V
Maximum Cable length	40 m @ 10 kHz max. frequency (98 pF/m Cable)
Highpass	0.45 Hz
Lowpass	16.5 kHz
Protection	Open or short of sensor is not detected, no damage to amplifier
Dimensions	61 x 55 x 16 mm ³

Subject to change without notice.



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