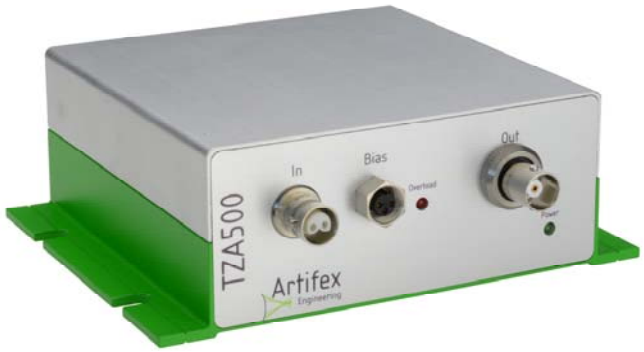
Current Offer!

Transimpedance Amp TZA500



Highlights:

- o Flexible setup
- o Easy to use
- o Compact

The TZA500 is a versatile transimpedance amplifier for measuring the current output of a wide range of sources such as

- photodiodes
- photomultipliers (PMTs)
- scanning tunneling microscopes (STM)

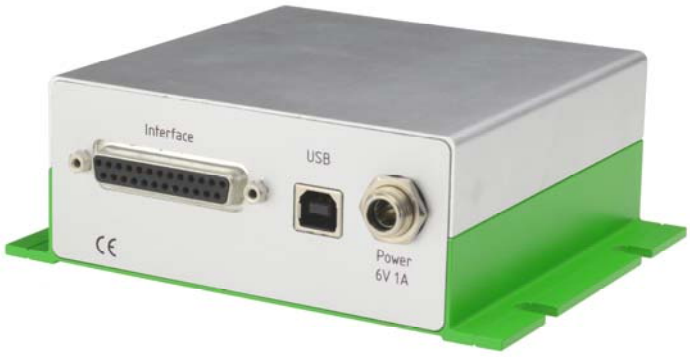
The compact design allows use direct at the source for low noise and pickup. The sturdy enclosure with mounting wings serves use in the lab as well as for OEM applications. This instrument can be delivered with various inputs

- single ended
- single ended with external bias input
- differential

Functional control is via the USB interface or via the DB25 hardwire interface for direct, sub µs control of all parameters. This feature is useful for OEM implementation in feedback loops such as fibre alignment applications.

The graphical user interface is intuitive to use and easy to read! The software includes a scope function, data logging and a large, digital display – perfect for daily use in the lab or in the field. Further functions such as autogain, offset nulling, bandwidth control and various storage formats are also included.

The TZA500 is small and is USB controlled. Not only the small size qualifies this instrument for OEM applications. It is very simple and flexible to integrate into your project. The unit comes delivered with drivers for direct communication or to be used as a virtual COM-port. Furthermore, we provide a full software development kit including the source code for the GUI application as well as a demo LabView-VI®.



Highlights

- USB controlled
- 30 Hz update rate with GUI, 1000 Hz as data logger
- 6 gain ranges from 100nA to 10mA full scale (30pA NEI !)
- Selectable bandwidth limitation

Your problem is our challenge – flexibility is our standard:

We will gladly adapt, for example, the current range or the case style to suit your application. Let us know your requirements.

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Artifex Engineering e.K.
Dortmunder Str. 16-18
26723 Emden, Germany

General Manager: Dr. Steven Wright
Registry number: HRA 200036

Tel: +49-(0)4921-58908-0
eMail: info@afx-eng.com
Web: http://www.afx-eng.com/

Ordering Information

Full order code: TZA 500 c i r n

	Option	Description
Case style (c):	G	OEM style[1]
	L	Lab style
Inpur (i):	D	Differential
	S	Single ended
	B	Single ended with bias
Input receptacle (r):	B	BNC
	T	BR2
Number of channels (n):	1 to 4	

Specifications

Parameter	Conditions	Min	Typ	Max	Units
Input					
Current ranges (full scale)			10 1 100 10 1 100		mA “ µA “ “ nA
Noise equivalent current (NEI_{RMS})	Range: 10mA 1mA 100µA 10µA 1µA 100nA			300 30 3 300 30 30	nA “ “ pA “ “
Impedance		0 (virtual short circuit)			Ω
Connectors		BNC and BR2[2]			
Output					
Function		Linear analogue V_{out} = scale x I_{in}			
Output scale	Range: 10mA 1mA 100µA 10µA 1µA 100nA		1 10 0.1 1 10 0.1		V / mA “ V / µA “ “ V / nA
Connectors		BR2[2] and DB25			
Output range (full scale)				10	V
Rise / Fall time (10% - 90%)	Small signal (-1→+1V) Large signal (-10→+10V)			45 65	µs
Settling time (1%)	Small signal (-1→+1V) Large signal (-10→+10V)			100 140	µs
Accuracy		± 1			%
Linearity			± 0.1	± 0.2	dB
Output impedance				50	Ω
Logic					
Current required for switching (5V)		-10	0.01	10	µA
Switching time				150[3]	µs
Power Supply					
Type		Wall plug (supplied)			
Dimensions		30 x 50 x 60			mm
Dimensions		130 x 45 x 116 mm (w x h x l)			

[1] Compact OEM-style case with gull wings for mounting

[2] Adapters for other connector systems available upon request

[3] Logic switching < 1µs. Effective switching time limited by settling time.