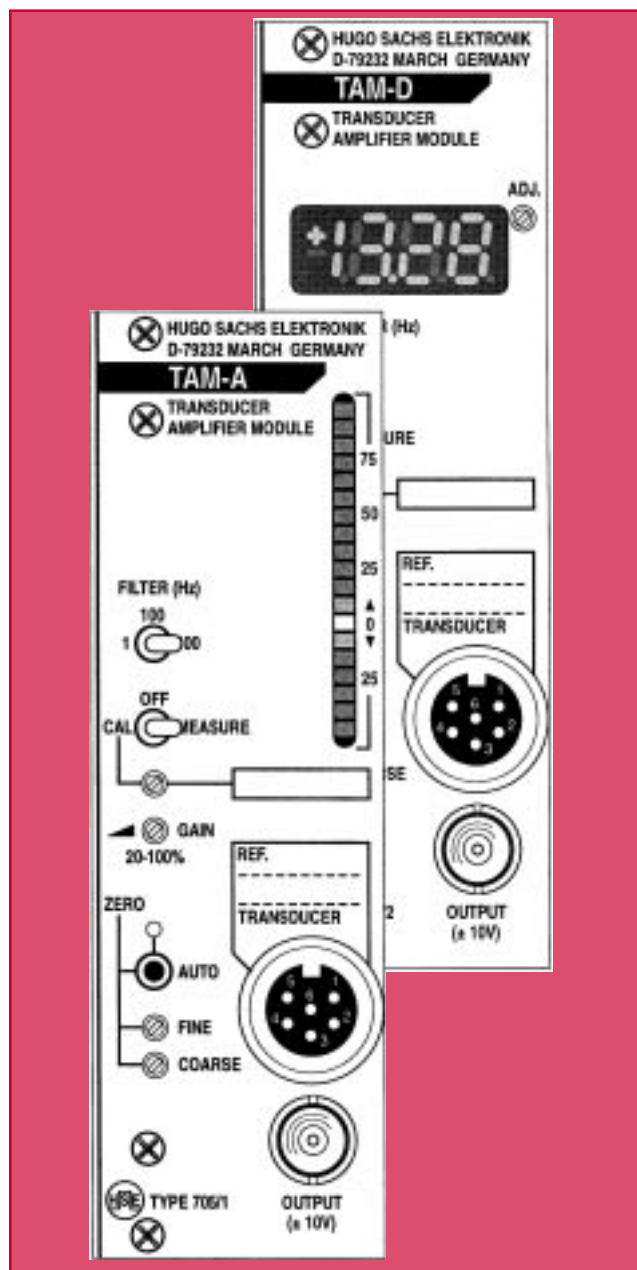


HSE-Harvard* Transducer Amplifier Module (TAM-A, TAM-D)



- Universal transducer preamplifier for pressure, force, displacement transducers
- Two models:
 - TAM-A with a bar graph if dynamic signals must be visualized (LVP, blood pressure, contraction of beating organs, etc.)
 - TAM-D with digital display for quasi-static measurements (contraction force of smooth muscle, mean perfusion pressure of isolated organs, etc.)
- Autozero and electrical calibration feature

Specifications

Bridge Supply Voltage	+5V / 50 mA max.
Transducer Input	6-pin socket with screw lock (binder, Amphenol Tuchel) Differential input circuit, input impedance $10^{10} \Omega$
Gain	Selectable Ranges by Internal Jumper: 0.2 to 10, 0.4 to 20, 1 to 50, 2 to 100, 4 to 200, 10 to 500, 20 to 1000, 100 to 5000, 200 to 10000. Fine Adjustment Through 10-Turn Trimmer
Bridge Balance	Through 10-turn trimmer coarse adjustment and electronic autozero by push button (LED for error if autozero is not possible)
Signal Output	a) On front panel through BNC socket ± 10 V pulsatile filtered or mean signal output internally selectable b) Through bus connector to PLUGSYS measuring system through links ± 10 V pulsatile filtered and mean signal voltage
Output Low-Pass Filter	a) Selectable by switch on front panel for pulsatile output signal: 1, 100, 300 Hz b) Selectable by internal jumper for mean output signal: 0.1, 0.3 Hz
Analog Indication	TAM-A LED bar graph 20 LEDs (+13/-7) for visual check on the signal sensitivity approx. 1 V/LED TAM-D 3 1/2-digit LED display
Electrical Calibration	Selectable by switch on front panel: a) 0 V output signal with switch in position '0' b) Positive or negative calibration output voltage adjustable with a 10-turn trimmer if switch is in position 'CAL'

Catalog No.	Product
CGS 8398.28	TAM-A Transducer Amplifier Module
CGS 8399.28	TAM-D Transducer Amplifier Module

The Transducer Amplifier Module is a DC amplifier with bridge. It is used to amplify physiological signals like blood pressure, contraction force and contraction displacement using transducers based on a resistive Wheatstone bridge. Transducers with a built-in preamplifier which have a high level DC output voltage can also be connected. There are two TAM modules from which to choose; TAM-A (analog) and TAM-D (digital display). The TAM-A is equipped with an analog LED bar graph signal indicator and is best suited for applications which require the monitoring of dynamic signals, e.g. blood pressure. The TAM-D has a digital numeric display and is best suited for applications with slowly changing signals, e.g. isometric or isotonic contractions, intracranial pressure or venous blood pressure. As in all bridge amplifiers manufactured by HSE, the unit incorporates a calibration facility.