



# FE-(H)389-TA TRANSDUCER AMPLIFIER



- GAIN RANGE FROM x5 TO X10000
- (H) VERSION BANDWIDTH > 2MHz
- *SMART* INPUT STAGE (H) OPTIMISES BANDWIDTH / NOISE AS REQUIRED
- VERY LOW NOISE & LOW DRIFT
- WIDE RANGE LOW PASS FILTER
- 10V to 36V DC POWERED
- STANDARD VERSION, HARDWARE UPGRADABLE TO (H) VERSION

This high performance DC Bridge / Transducer Amplifier replaces both the FE-379-TA & FE-H379-TA amplifiers and is available in two versions. The standard FE-389-TA has a bandwidth of >1MHz and gains from x10 to x5000. The standard version is hardware upgradable to the FE-(H)389-TA version. This provides an increased gain range (x5 to x10000) and a *SMART* Input Stage that automatically configures itself to provide the lowest noise or highest bandwidth (>2MHz) depending on the Front Panel settings. Because of the *SMART* Input Stage the output noise of the FE-(H)389-TA with a >2MHz bandwidth is substantially lower than that of the FE-H379-TA (bandwidth 500kHz). Low Frequency (L.F. or 1/F) noise has also been substantially lowered. Six Front Panel push buttons and a single rotary controller allow for simple adjustment of all functions (*gain, filter, bridge volts, cal, auto-zero, auto-balance etc.*) A ring of 19 multi-colour LEDs around the controller are used to indicate all the function states. Once set up is complete, all controls can be *locked* to help avoid inadvertent changes to settings.

It is suitable for use with DC bridge type transducers and complete or fractional strain gauge bridges. Because of its high bandwidth (>2MHz), the FE-(H)389-TA is highly recommended for Hopkinson Bar type measurements.

Bridge supply is fully variable from 100mV to 12 volts at 50mA capability, with remote sensing allowing operation through zener barriers if required. Thirteen user adjustable factory presets are also available.

Dynamic Voltage and dc shunt calibration with remote control facilities are provided, as well as alternative external resistive methods. A wide range, front panel switched, active Low Pass Filter is standard.

The module is powered from 10V to 36V DC. This allows it to be used directly in automotive environments or it can be mains powered via standard mains adaptors.

Housings are available for individual modules or for multi-channel systems.