High Bandwidth 4 Channel Capacitance Probe Amplifier for Turbine Installations
FE-596-CDT4

- Wide Measurement Bandwidth
  0.16Hz to 375kHz -3dB (-0.1dB >200kHz)
- Low Noise (0.5aF/√Hz)
- Auto-Tuning for input cable lengths up to 30m
- Auto-Balance to remove static capacitive & resistive leakages.
- Maintains high measurement accuracy with high Probe & cable temperatures
- Quasi-DC Mode for Static Measurements
- Remote configuration and control via ethernet with stand-alone operation

The FE-596-CDT4 is a 4 channel Capacitance Probe system for gas turbine measurements of blade tip clearance and time of arrival. The system has high bandwidth and low noise which facilitates vibration analysis applications.

Both triaxial fully guarded and low capacity pseudo triaxial type probes may be used. Probes may be situated up to 30m away from the FE596CDT4 by using a combination of Mineral Insulated (MI) & Low Capacity Triaxial Extension (LCTE) cables.
Remote configuration and monitoring over a LAN or WAN is very simple and powerful. Auto-Tune & Auto-Balance commands quickly optimise the FE596CDT4 to work with any connected Probe / Cable combination. Gains may be set over a wide range to achieve the best possibe Signal to Noise Ratio (SNR), whilst avoiding clipping with large signals. Commands allow for diagnosis of both System and Probe health.
Multi-colour LEDs indicate the status of each channel.

For maximum versatility the system is powered from 24V DC

Rugged Instrumentation.... with **FYLDE** analogue performance