

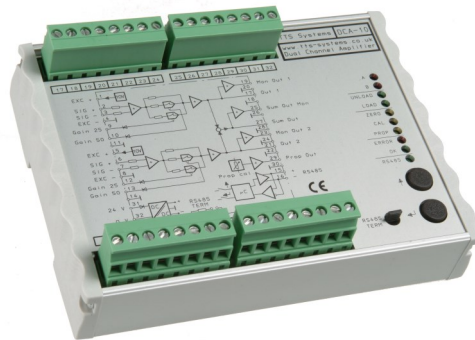


MEASUREMENT AND CONTROL SOLUTIONS

TRANSDUCER SIGNAL CONDITIONING AMPLIFIER DCA-10

Features and Benefits

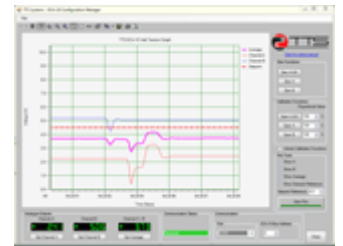
- Simple calibration for offset and span via software or push button
- Data logging and diagnostic tool. Software downloadable from website
- Left, Right, Average values as standard on six outputs
- Multiple ranging function
- Proportional calibration feature
- RS485 interface
- Circuit schematic with connections on front panel
- DIN rail mounted
- 24V DC supply
- 10V excitation



The DCA-10 from TTS provides load cell signal conditioning for all full bridge transducers. When used for signal conditioning of load cells in web tension applications each cell is amplified separately.

A well established product the DCA-10 is regarded by many machine builders as undoubtedly the simplest and most efficient product of its class and has demonstrated time and time again its ability to reduce installation and commissioning costs.

Combined with our free configuration manager and data logging software tool the DCA-10 is enhanced with useful diagnostic tools. For example it can show web steering problems or poor control performance. The software can also be used by quality control departments.



Working with either a pair of transducers or as two single load cells its dual channel capability gives repeatable and stable signals for onward processing in open or closed loop applications. A 0...10V output signal proportional to load is provided for each individual channel as well as for averaging of a load cell pair.

A single pushbutton configures offset and span making calibration simple and fast. It also has a proportional calibration facility for calibrating awkward or heavy values.

Let's Talk

www.tts-systems.com



14 Highpoint Business
Ashford
Kent
United Kingdom
Phone: +44 (0) 1233 624422
Fax: +44 (0) 870 705 9678
E-mail: support@tts-systems.com

Specifications

General

Supply voltage.....	24V DC +/- 10% / ripple ≤ 5%
Consumption.....	max 2.5W
Suitable bridge.....	full Wheatstone bridge only
Bridge resistance.....	350Ω
Excitation voltage.....	10V / max. 30mA
Zero adjustment (TARE).....	automatic
Possible offset range.....	12.5mV is equal to max. 50% of sensor signal at 25mV end range
Adjustment for amplification.....	automatic
Possible input range.....	2mV to 25mV
Overload capability of inputs.....	0... +/- 50mV
Input resistance.....	1MΩ
Channel 1.....	0...+10V filtered and unfiltered / max. 5mA
Channel 2.....	0...+10V filtered and unfiltered / max. 5mA
Average signal.....	0...+10V filtered and unfiltered / max. 5mA
Ambient temperature.....	0...50°C
Connections.....	screw type terminals 2.5mm ²
Range switching.....	25%, 50%, 75%, 100% by switching inputs 9, 10 and 12, 13
Max. frequency.....	5kHz
Monitor output.....	0...+10V / max. 5mA
Max. frequency.....	0.3Hz
Linearity error.....	0.005%
Temperature drift.....	0.002% / K
Tare zeroing.....	automatic
Zero point error.....	+/-5mV
Amplification.....	automatic
Amplification error.....	+/-5mV
RS485 serial link.....	9600 Baud, 8 Data bits, 1 Stop bit, no parity

Mechanical

Material.....	green insulating material
Mounting arrangement.....	snap on fixing arrangement for TS35
Housing measurements.....	see diagram
Weight.....	250g

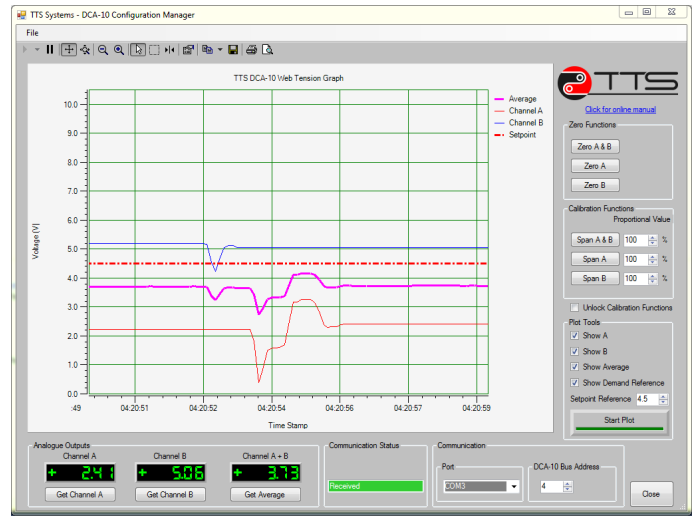
Ordering Details

DCA-10..... standard configuration, foil gauges, 10V excitation, full bridge network, 20mV input

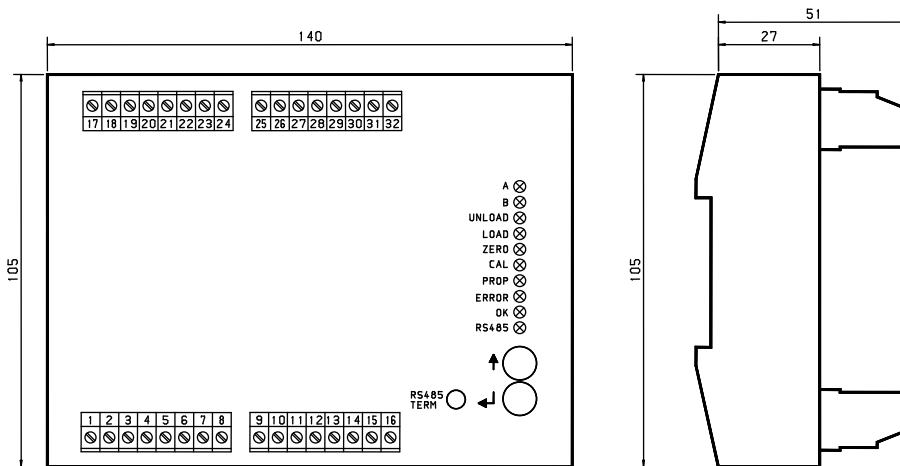
Configuration Manager and Data Logger software

TTS provide a free Windows program that allows the user to configure the DCA-10 with a single push of a button

The software is a useful diagnostic tool as well as providing data logging making this a perfect complement to an already successful product



Free download from
www.tts-systems.com/prod-amplifiers.htm
 No registration required



Total Tension Solutions design and manufacture a wide range of products for use in web and wire processing. We can provide complete turnkey solutions housing simple components though to sophisticated cubicles incorporating multiple drives, PLCs and related items all constructed to very high standards.

Please contact TTS on 01233 624422 or through the internet on www.tts-systems.com if you require any assistance or further guidance.