

**Data Acquisition and Data Logging Systems**

www.datataker.com

**Channel Expansion Module Series 3**

- Full *dataTaker* Universal Channel Support
- Robust Relay Multiplexer
- Low Cost Channel Expansion
- Easy to Set-Up
- For the *DT500* & *DT600* range of *dataTakers*
- Internal Reference Temperature Sensor
- Powered from Host Unit
- 3 Year Warranty
- Removable Screw Terminals



**Increased Channel Capacity**

You can easily increase the number of analog and digital channels that your *dataTaker* data logger has by using the *dataTaker* Channel Expansion Module (CEM).

Designed to suit the *DT500*, *DT505*, *DT515*, *DT600*, *DT605*, *DT615* *dataTakers*, each CEM will add 10 differential or 30 single ended analog voltage channels, or 10 resistance or RTD channels, or 10 current or 4–20mA loop channels, in any combination.

The analog input channels use relay multiplexing, providing voltage measurement of up to  $\pm 100V$  when used in conjunction with relay multiplexed *dataTakers*.

The CEM also has 20 digital input channels, as well as 5 open collector 200mA/30Vdc digital outputs and 5 voltage free 110Vac/5A output contacts.

**Easy Setup**

A maximum of 2 CEMs can be connected to a *dataTaker*. You simply plug them into the *dataTaker* using a provided cable. They are powered from the *dataTaker* through this cable and *dataTaker* firmware has an intelligent CEM controller, so reconfiguration of the *dataTaker* is not necessary.

The CEM has an internal temperature sensor which can be used for cold junction compensation when using thermocouples. There is a floating single ended reference input which allows a remote common connection to be used when making voltage measurement. In addition, a terminal is provided for external switched sensor excitation.

**Solid Construction**

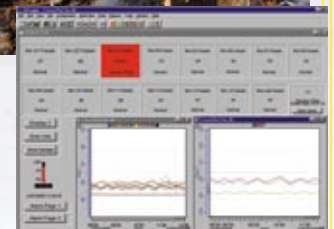
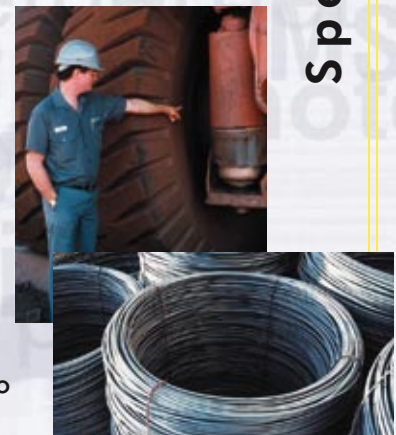
Construction of the CEM is similar to a *dataTaker*, with the same removable screw terminals and a sturdy powder coated steel case, height 50mm and weight 1.0kg. Mounting holes in the end plates of the CEM allow mounting to a plate or case using fixing bolts, and threaded studs have been provided on the top lid to allow for easy stacking.

The operating temperature range is  $-20^{\circ}C$  to  $+70^{\circ}C$ , and maximum humidity 85%RH.

**Warranty**

The *dataTaker* CEM is covered by a 3 year warranty on workmanship and parts. For further information on the *dataTaker* range, or for useful downloads, visit the *dataTaker* web site at [www.datataker.com](http://www.datataker.com) or contact your nearest Datataker office or dealer.

**Specifications**



**dataTaker**  
Certified to ISO9001  
TOTAL QUALITY COMMITMENT  
Australia Only

*dataTaker* is a registered trademark of Datataker Pty Ltd.



**Head Office**

Australia  
Datataker Pty Ltd  
7 Seismic Court  
Rowville Melbourne  
Victoria 3178  
Tel: +61 3 9764 8600  
Fax: +61 3 9764 8997  
Email: [sales@datataker.com.au](mailto:sales@datataker.com.au)



United Kingdom  
Grant Instruments (Cambridge) Ltd  
Shepreth  
Cambridgeshire  
SG8 6GB  
Tel: +44 (0) 1763 264780  
Fax: +44 (0) 1763 262410  
Email: [sales@datataker.co.uk](mailto:sales@datataker.co.uk)



United States of America  
Computer Aided Solutions  
8588 Mayfield Rd, Suite One  
Chesterland, OH 44026  
Tel: +1 800 9 LOGGER  
Tel: +1 440 729 2570  
Fax: +1 413 375 6137  
Email: [sales@datataker.com](mailto:sales@datataker.com)