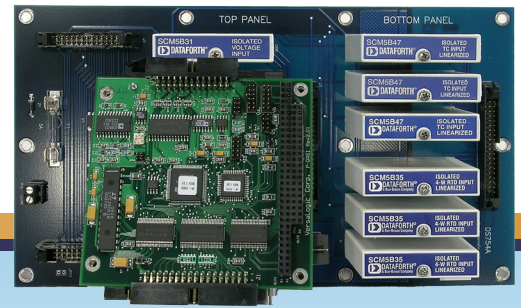


Companion II

Dynamometer Data Acquisition System



Features

- MCU performs data acquisition, multiplexing, and analog to digital conversion
- MCU includes an integral power supply for external transducer excitation
- Standard Serial communication interface
- Data Collection rates of up to 20Hz for Cell Assistant for both LabVIEW and Windows
- SCU are easily customizable using 5B signal conditioning modules
- Independent cold junction compensation for accurate temperature measurement
- Rack mount utilizes Sub-D connections for external voltage interface
- Rack mount utilizes miniature thermocouple connector for temperature inputs
- Utilizes terminal block connections for all external interface
- Additional SCUs can be added with minimal effort.
- Channel count expanded in groups of six up to 120
- Custom systems engineered upon request

Testing Applications

- Engine
- Electric Motor / Alternator / Generator
- Transmission / Transaxle / Differential
- Component / Gear Box / Lubricants

Companion II (C-II), a Dyne Systems, Inc. proprietary data collection system, is comprised of a Master Control Unit (MCU) and Signal Conditioning Unit (SCU) unit. C-II can be integrated with Cell Assistant™ for either Windows® or NI LabVIEW™ for test automation. These two components are available in 3.5" rack mount boxes, or all combined into one wall mount enclosure. The user is able to choose between a wide variety of inputs including temperature, frequency, current, and analog voltage (i.e. TC, RTD, Strain Gauge, Pressure Transducer, etc.)

Dimensions

**19" Rack x 7"h x 15"d
(24 Channels)**

**Wall Mount - size dependent on
number of inputs**

Control Power

120 - 240 V, 2.0 Amps

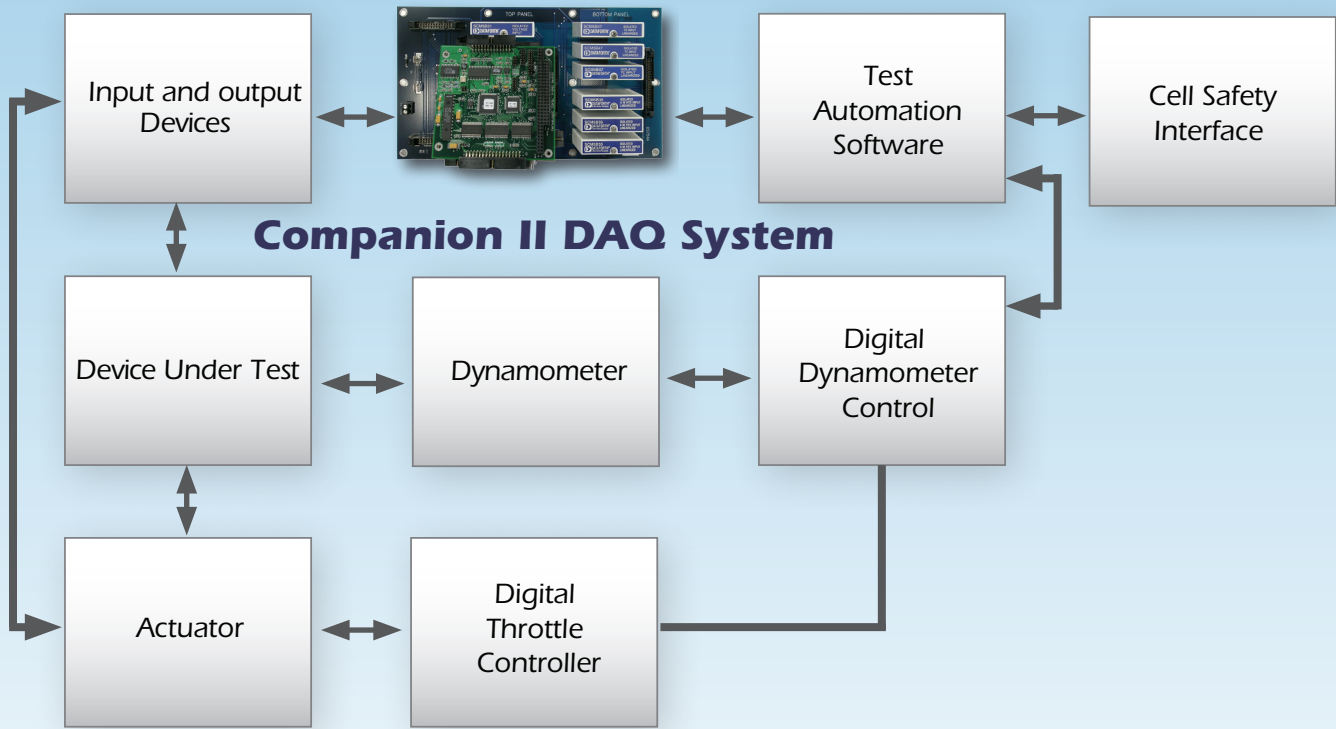
Environmental Limits

Air Temperature: 0° to 40°C (104°F)

**Relative Humidity: 0 to 95%
No condensation allowed**

Optional Configurations

**Wall mount, boom arm, pedestal
mount and rolling cart**



Dyne Systems Product Line

Closed Multi-Loop Dynamometer & Throttle Control

- Inter-Loc V
- DS630 Inter-Loc V Throttle Controller

Closed Single-Loop Dynamometer Control

- Dyn-Loc IV
- Dyn-Loc V

Closed Loop Throttle Control

- DTC-1
- DS830 Stand-Alone Throttle Controller

Open Loop Dynamometer Control

- DS820 Eddy Current PAU

Closed Loop Water Flow Control

- EWC-1

5-Gas Exhaust Analyzer

- XM2000

Data Acquisition

- Companion II: Dyne Systems proprietary
- Companion III: Yokogawa based
- Companion IV: NI cRIO based

Test Automation Software

- Cell Assistant for Windows
- Cell Assistant for LabVIEW™ (VeriStand™)

Test Cell Safety PLC Interface

- CIA I: Automation Direct / Koyo
- CIA II: Horner
- CIA III: ABB
- CIA IV: Allen-Bradley

Throttle Accessories

- Actuator, Remote Pendant, Cables

Eddy Current Dynamometers

- 5–5000 Hp

AC Dynamometers and Drives

- 5–1600 Hp

DC Dynamometers and Drives

- 5–1200 Hp