

DTC-1

Digital Throttle Controller



Features

- Controls throttle position to regulate Speed and Torque with digital of +/- 1 unit of accuracy.
- Manifold Absolute Pressure (MAP) and Manifold Vacuum control modes are available as options
- Position is sensed by an optical encoder to 0.005%
- 16 PID parameters sets allow ease of engine change while maintaining ideal control
- Integral safeties include over-speed, under-speed, Dyn-Loc power failure, Throttle Jam, Power Failure and E-stop
- No transient effects as a result of mode changes or On/Off activity
- Complete repeatability with no need for analog/digital and digital/analog calibrations
- High response speed and torque for FTP engine testing
- On-the Fly PID parameter entry for fine tuning control from PC
- Up to 1300 lines of BASIC programs (32K) can be downloaded for use in stand-alone engine testing
- Membrane keypad

The DTC-1 is designed to provide precise, repeatable and stable throttle control. Software based, the DTC-1 adapts quickly to changes in operating conditions to provide a wide range of stable engine throttle control in all modes.

Dimensions

19" Rack x 7"h x 13.5"d

Control Power

120 V, 2.0 Amps

Environmental Limits

Air Temperature: 0° to 40°C (104°F)

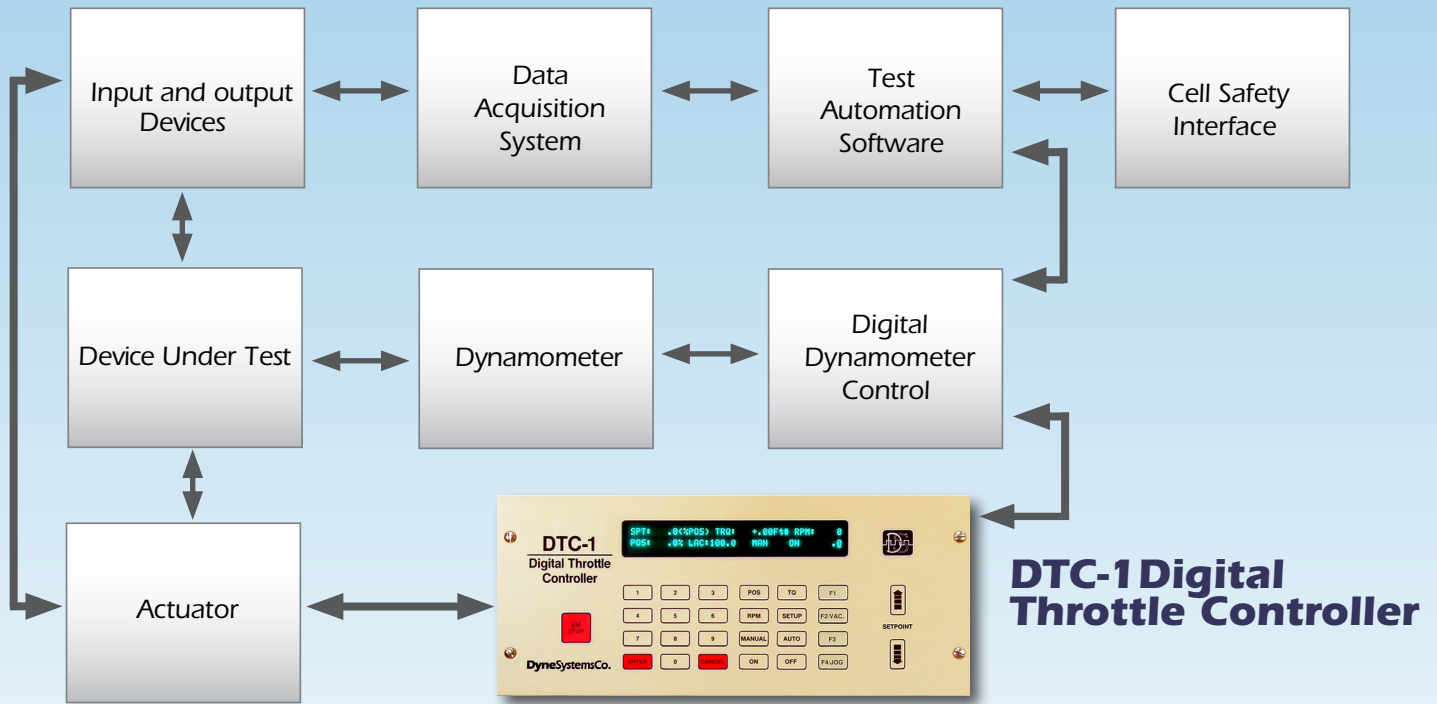
Relative Humidity: 0 to 95%
No condensation allowed

Optional Configurations

Rack mount and pedestal mount

Testing Applications

- Engine



Dyne Systems Product Line

Closed Multi-Loop Dynamometer & Throttle Control

- Inter-Loc V
- DS630 Throttle Controller

Closed Single-Loop Dynamometer Control

- Dyn-Loc IV
- Dyn-Loc V

Closed Loop Throttle Control

- DTC-1
- DS830 Throttle Position 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

- 5–1600 Hp