

DynaGen™

TOUGH SERIES™ PRO

CONTROLLERS FOR INDUSTRIAL ENGINES AND GENERATORS

- HIGHLIGHTS**
- Designed for complete control, protection and engine instrumentation on mechanically or electronically governed engines
 - Easily configured using the front panel buttons or the RapidCore™ configurator software
 - Ideal for severe duty applications where reliability is critical
 - Supports all major diesel engines including mechanical Tier III, Tier IV Interim and Tier IV Final
 - Support for spark ignition engines across most brands
 - Tier 4F and Euro Stage V compliant. Call factory for engine types
 - Able to withstand light pressure washing at 1200 psi at 1 foot away
 - OEM private label branding available

- FEATURES**
- Sunlight readable color display
 - Supports mechanical or CANbus J1939 engines
 - Configurable Diagnostic Trouble Code (DTC) readout
 - Manual and automatic modes
 - Front panel RPM adjustment buttons
 - Full electronic variable speed control over J1939
 - Conformally coated for protection against moisture and contaminants
 - Front panel gasket for panel water ingress protection meets IP67 standards
 - Configurable remote bump speed control
 - Configurable ramping control with 3 set points: idle, intermediate and goal RPM
 - Adjustable min and max RPM limits
 - Configurable startup speeds based off running mode (auto or manual)
 - Single or dual float switch input control
 - Autostart trigger on sensor value (pressure, temperature, level voltage)
 - Closed loop control using feedback from sensors such as level and pressure (maintain-in and maintain-out)
 - Built-in weekly scheduler
 - Maintenance counter
 - A full selection of timers and long-time run function
 - Easy-to-use field configuration from front panel menu (passcode protected)
 - Supports standard Modbus RS485 communications
 - Configurable/replaceable buttons with custom text
 - Fits same cutout as TE350/410 controllers and TG350/410 controllers

- OPTIONS**
- AC current sensing standard for generator applications available for TG600 model only



TE



TG





TECHNICAL DATA AND SPECIFICATIONS

Battery	
Range	5.5 - 38 VDC
Cranked Dropout to 0VDC	50ms
Reverse Battery	Yes
Standby Current	45mA

Display	
Resolution	480x272 (WQVGA)
Diagonal	4.3"
Type	TFT
Storage Temperature	-40°C to 85°C
Operating Temperature (w/o heater)	-30°C to 85°C
Outdoor Readable	Yes
Brightness	1000 nit
Contrast Ratio	600:01:00

Buttons	
Number	6 + 5 soft buttons
Relegendable Key Caps	Yes

Mechanical	
Dimensions	7.44" x 4.9"
Cutout Size	6.44" x 4.04"
Sealed Enclosure	Meets IP67 requirements
Sealed to Panel	Meets IP67 requirements
Connectors	2 x 35 Pin AMPSEAL

Communication Ports	
CANbus J1939	
Number	1
Modbus RS485	
Number	1
Software Configurable Internal Resistor	Yes (120 ohms)
USB	
Mode	Slave

Inputs	
Switched Inputs	
Number	12
Software Configurable	Yes
Minimum Trigger Delay	<100ms
Decision Threshold	3 VDC
Analog Inputs	
Number of inputs	10
Software Configurable	Yes
Separate Battery and PCB Temp Measurement	Yes
Accuracy	+/- 2%
Frequency Inputs	
Number of Inputs	1
Range (input 1)	10-10,000Hz at 1~50 VAC
Internal Sensors	
Battery Voltage	Yes
Internal Temperature	Yes
AC Voltage	
Number	3 Phase
Max Voltage	6 VRMS
Accuracy	1% full scale (600V)
Configuration	Single Phase 2 & 3 Wire Delta 3 & 4 Wire Wye 2,3 & 4 Wire
AC Current	
Amount	3 Phase
CT Type	5A Secondary
Accuracy	2% Full Scale

Outputs	
Switched Outputs	
Number	10
Type	High Side Switches
Max Current per Channel	1A
Logic Level Drive Capable	Yes

Other Features	
Real-Time Clock	Yes, 5 year backup
Protected 5V Supply Output	Yes, 0.4A
Custom Branding	Yes
Warranty	Five-year warranty or 17,500 hours