Tiger Family
Robust, Reliable, Programmable Edge Smart Meter Controllers and Transmitters for your IIoT Applications

Compact Versatile Custom App Automation

CE

c(UL)us LISTED E469078

▸ IIoT Edge Computing, Distributed Control System and SCADA ready
▸ Combine Process Control and Micro PLC
▸ Out of the box process control including PID, easy setup, no PLC programming required
▸ MicroRack modularity for easy maintenance and reconfiguration
▸ Industry's widest range of signal conditioning input modules (140+)
▸ Common Setpoint Control Outputs supported (relay, logic, SSR)
▸ Analog Outputs available (single or dual mA/DCV)
▸ 5, 6 and 8 Digit Display in multiple DIN case sizes available
▸ Ethernet, RS-485, RS-232 communication options (ASCII, Modbus)
▸ Texmate BASIC structured text language for Custom Applications
▸ PC utility for custom meter configuration/setup
▸ Made in USA, UL Certified

Optional Ultra-Short Depth Remote Display

96x48 mm Short Depth Case
96x48 mm Case
Remote Display PCB
6-wire Display Connector
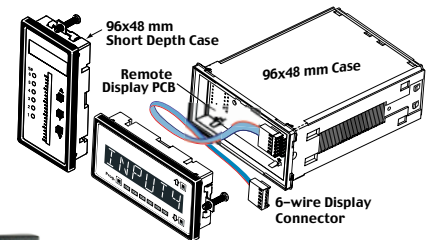
TI Series Transmitters

NEW

Tiger Transmitters with Optional HMI Touch Screen Display

GI-50
144x72mm 9/32 DIN

DI-802XA

36x144mm 9/64 DIN

DI-60A

DI-60X

DI-60

DI-60A5C

DI-50

DI-602A5C
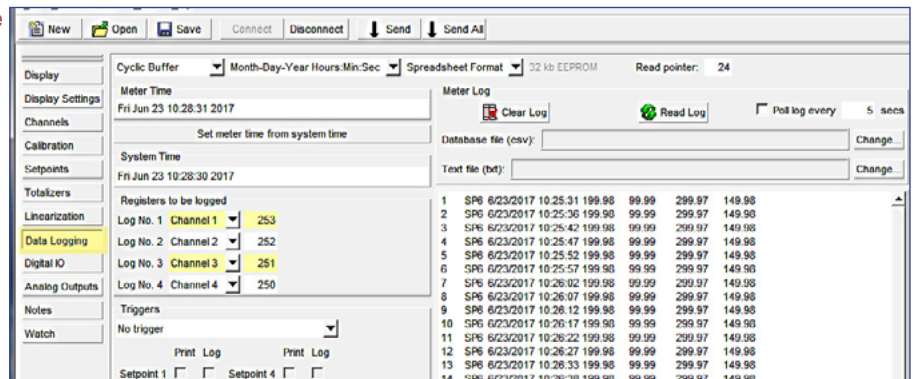
DI-503

DI-50AN6

DI-50B51

FI-B101D50

48x96mm1/8 DIN

96x48mm1/8 DIN

Embedded Application Software Includes:

- Up to 4 input channels with cross channel math (A+B, A-B, AxB, A/B) between two channels for multi-channel processing
- Full Floating-point Math
- Square Root, Inverse and Log of Input
- 4 x 32 Point Or 1 x 125 Point Linearization Table
- Smart Auto Zero with Programmable Capture Band, Rate of Change and Aperture Window for Weighing Applications
- Set Tare, Reset Tare for Batching
- Smart Quick Response Averaging
- Smart Timer and Time Integration Functions
- Time and Event-based Sequencing
- Polynomial Calculations
- Remote Reset of Any Function
- Dual independant Totalizers
- Dual PID
- Peak & valley (max & min) with front panel recall and reset
- Setpoints activated from any input, any register in the meter or from any digital input.
- Autozero maintenance for super stable zero reading is provided for use in weighing applications
- Tiger Operating system programmable using BASIC syntax to develop custom applications (Macro).

The **Tiger Operating System** has built-in, sophisticated data logging software with date/time stamp to log in an endless loop. Number of samples limited only by the size of the SD card. It can be triggered from the PROGRAM button, digital inputs, time or alarm functions. **Data Logging** combined with an Ethernet interface for edge computing and cloud data analytics applications

15 year lithium battery
Real-time Clock for printing, data logging and activating a setpoint or control action at fixed times of the hour, day, week, month or year.
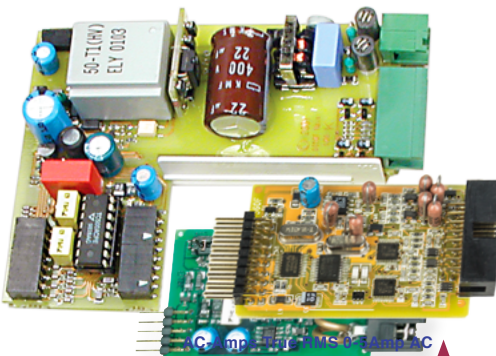
Confinguration & Programming the meter from a PC
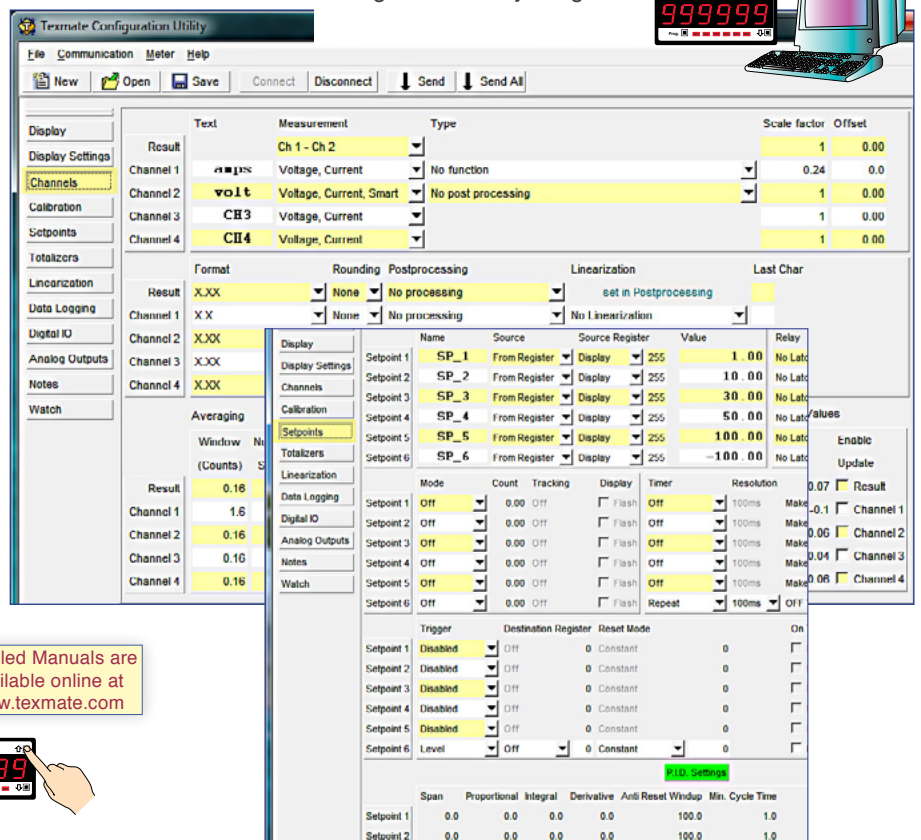
with Texmate's easy to use Tiger Configuration Utility Program.

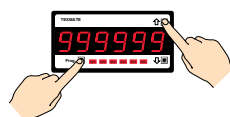## Over 140 Different Input Signal Conditioners to choose from

- Choose from over 140 different single, dual, triple and quad input signal conditioners.
- Mixed function and smart modules with their own A/D's, co-processors, SSR's and I²C Bus outputs are available to suit almost any application.
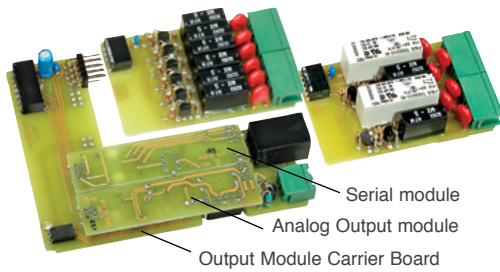
Programmable Front Panel Controls

The front panel buttons can be used to control or program any standard functions. or to only access and display specifically designated functions, such as on demand Tare, Auto-Cal and Compensation.
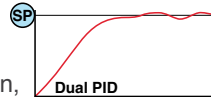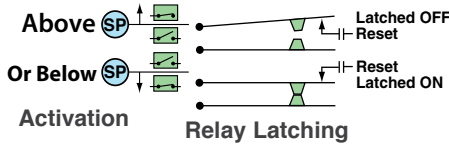
Detailed Manuals are available online at www.texmate.com

4 Amp and 9 Amp Relays or optional SSR Outputs can be energized above or below setpoints.

Above **SP**

Or Below **SP**

Activation

Latched OFF
Reset

Reset
Latched ON

Relay Latching

Serial module
Analog Output module
Output Module Carrier Board

Dual PID

6 super smart, independently programmable setpoints with 8 selectable functions, including latching, deviation, hysteresis, register resetting, tracking and PID plus 7 programmable timer modes on all 6 setpoints

7 Multi Function Interval Timers on all 6 setpoints

Normal.................Adjustable Delay On Make / Adjustable Delay On Break
1-Shot ON ....Adjustable Delay On Make / Adjustable Min ON-Time
1-Shot OFF ....Adjustable Delay On Break / Adjustable Min OFF-Time
Pulse ON.............Adjustable Delay On Make / Adjustable Max ON-Time
Pulse OFF...........Adjustable Delay On Break / Adjustable Max OFF-Time
Repeat ON ....Adjustable ON-Time / Adjustable OFF-Time
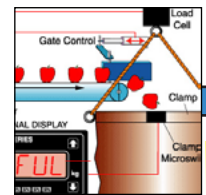Repeat OFF ....Adjustable OFF-Time / Adjustable ON-Time

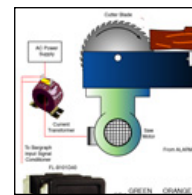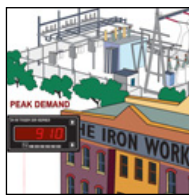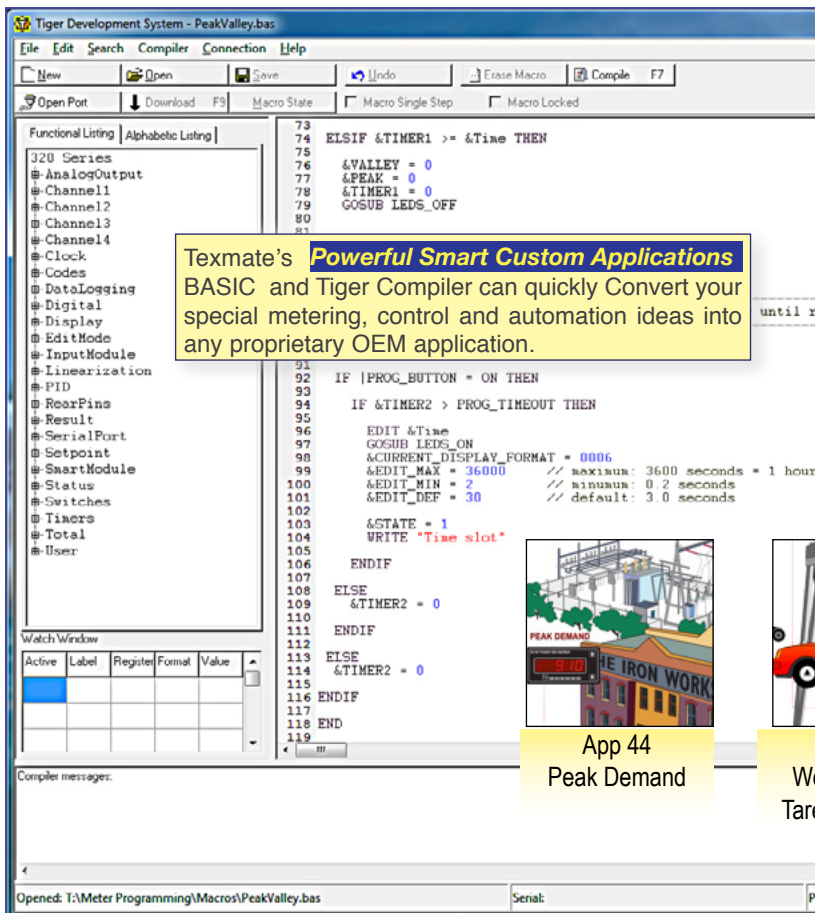**SP** → **TIMER** 60 15 30 45

Single & Multiple
Activation Timers
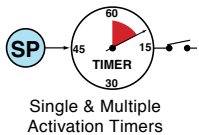
High Efficiency CE tested
Auto-sensing AC/DC Power Supply
• Standard 85-265 VAC / 95-300 VDC
• Optional Low Voltage 15-48 VAC /10-72 VDC

Programmable Function Pins

Function Pins
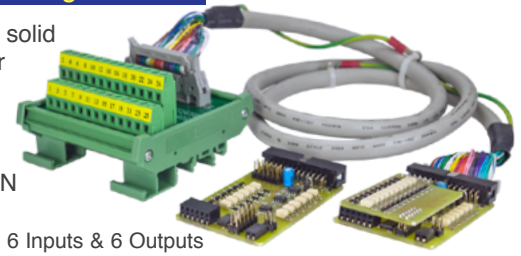
TEXMATE

CodE_9

Prog

Three logic level inputs are provided on the function pin header that can be programmed to STOP/START/RESET almost any function including: set tare, reset tare, relays, totalizers, print output, data logging, peak, valley, or any register from an external contact closure. Setup using Code 9.

Up to 22 Opto-Isolated I/Os Plug-in Module

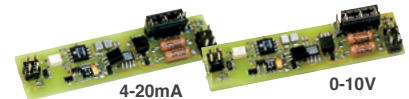Plug-in I/O modules include solid state relays, logic outputs or open collector outputs;

6 inputs & 16 outputs of opto-isolated I/O can be connected to an external DIN Rail terminal block module.

6 Inputs & 6 Outputs

6 Inputs & 16 Outputs
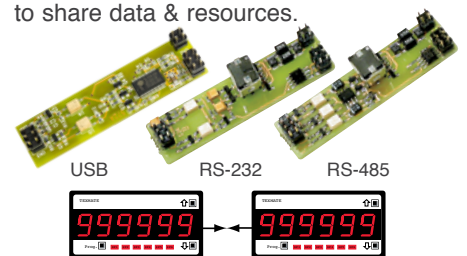Fully Programmable with custom applications

16-bit Isolated Analog OUtputs

Single and Dual Programmable 0/4 to 20 mA or 0 to 10 V for retransmission, 4-20 mA loops, drive valve actuators, remote controllers & displays, multi-loop feedback and PID output.

4-20mA   **0-10V**

Scrolling Annumciator up to 99 Characters long is available on all 6 setpoints for Alphanumeric Displays with Fill-in-the- blanks Custom Apps.

*99 CHARACTER SCROLLING DISPLAY ON ALL SETPOINTS

Serial Output Options include RS-232, RS-485, ModBus, Ethernet, USB or Direct **Meter to Meter** enables two meters to share data & resources.

USB   RS-232   RS-485

999999 ⟷ **999999**

Tiger Development System - PeakValley.bas

File Edit Search Compiler Connection Help

New   Open   Save   Undo   Erase Macro   Compile F7
Open Port   Download F9   Macro State   Macro Single Step   Macro Locked

Functional Listing | Alphabetic Listing

320 Series
⊞ AnalogOutput
⊞ Channel1
⊞ Channel2
⊞ Channel3
⊞ Channel4
⊞ Clock
⊞ Codes
⊞ DataLogging
⊞ Digital
⊞ Display
⊞ EditMode
⊞ InputModule
⊞ Linearization
⊞ PID
⊞ RearPins
⊞ Result
⊞ SerialPort
⊞ Setpoint
⊞ SmartModule
⊞ Status
⊞ Switches
⊞ Timers
⊞ Total
⊞ User

Texmate's **Powerful Smart Custom Applications**
BASIC and Tiger Compiler can quickly Convert your special metering, control and automation ideas into any proprietary OEM application.

```
73
74    ELSIF &TIMER1 >= &Time THEN
75
76        &VALLEY = 0
77        &PEAK = 0
78        &TIMER1 = 0
79        GOSUB LEDS_OFF
80
81
91
92    IF |PROG_BUTTON = ON THEN
93
94        IF &TIMER2 > PROG_TIMEOUT THEN
95
96            EDIT &Time
97            GOSUB LEDS_ON
98            &CURRENT_DISPLAY_FORMAT = 0006
99            &EDIT_MAX = 36000    // maximum: 3600 seconds = 1 hour
100           &EDIT_MIN = 2        // minumum: 0.2 seconds
101           &EDIT_DEF = 30       // default: 3.0 seconds
102
103           &STATE = 1
104           WRITE "Time slot"
105
106       ENDIF
107
108   ELSE
109       &TIMER2 = 0
110
111   ENDIF
112
113   ELSE
114       &TIMER2 = 0
115
116   ENDIF
117
118   END
119
```

until re

Watch Window

Active | Label | Register | Format | Value

Compiler messages:

Opened: T:\Meter Programming\Macros\PeakValley.bas   Serial:

App 44
Peak Demand

App 41
Weighing with
Tare Zero Offset

App 15
AC Current
Measurement
Load Control

App14
Bag Filling
Machine using
Load Cell Input

More

Super-Intelligent Tiger Micro PLC
Enable All Types of Sensors to Accurately Outperform Themselves

Infrared Emissivity Compensation and Linearization

Conductance and pH with Chemical and Biological Linearization and Compensation

LVDT, LDT & MDT Position & Displacement Measurement

Flow Calculation and Compensation BTU, Viscosity, and Mass with Linearization and Temperature Compensation

Torsion Load Measurement with Linearization

Strain and Weight with Linearization, Autotare, and Smart AutoZero Maintenance

LOAD CELL Temperature and Non-Linearity Compensation

CT or Shunt Linearization and Temperature Compensation with patented True RMS Conversion for Precision AC or DC Watts

Pressure Transducer Compensation and Linearization for Complex Volume Measurement

Semiconductor Near-Vacuum Precision Sensor Compensation

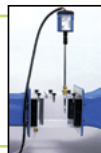Ultrasonic Sensor Compensation

Hygrometer 3D Linearization for Precision Dew Point

Quadrature Inputs from Encoders for Up/Down and Position

Mass Air Flow and Velocity

Environmental Emission Gas Sensor Linearization
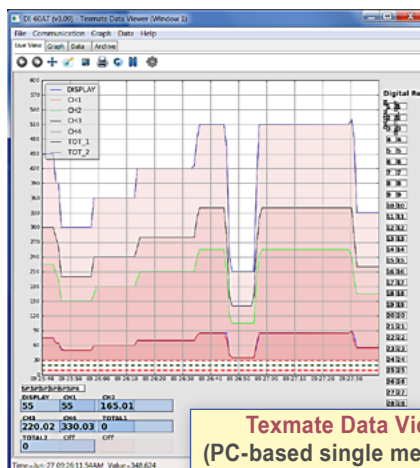
Measure, count, time, digitize, linearize, compensate, calculate, compare, accumulate, integrate, annunciate, display, control, record, report, communicate and automate any process, in any industry, from any sensor, with the Texmate Tiger Family of Programmable Meter Controllers.
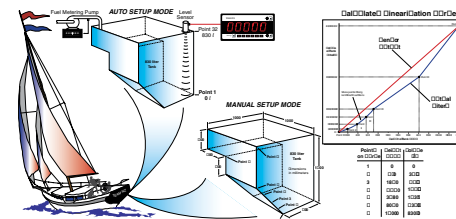
Custom applications for your smart metering and smart control industrial processes
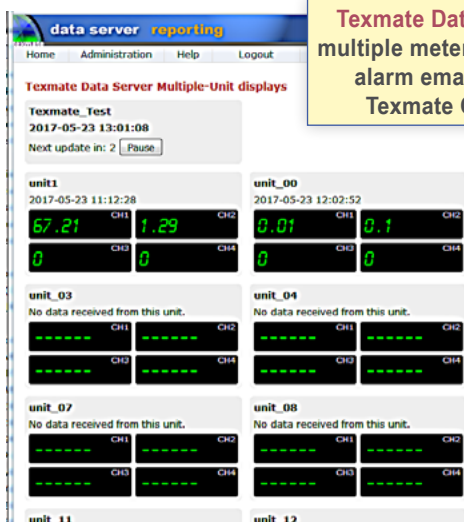
Texmate Data Server (PC-based meter server with multiple meter viewer, meter-to-meter data exchange, alarm emails, and historian database, requires Texmate Custom Application to be installed)

App 23 Linearize Yacht Fuel Tank Application

App19 Fruit Weighing Application

Texmate Data Viewer
(PC-based single meter data log viewer, historian with Batch Controller application)

TEXMATE
Smart Metering Smart Control
Since 1976

450 State Place, Escondido, CA 92029
- For ordering info call:...... 1-800-TEXMATE (800-839-6283)
- For tech assistance call: (760) 598-9899
- Email: orderss@texmate.com