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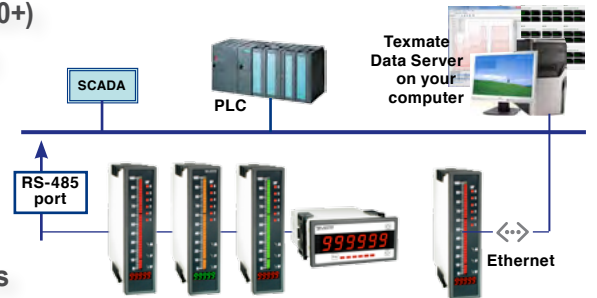# Robust, Reliable, Programmable Smart Edge Meter Controllers and Transmitters for your IIoT Applications

Texmate Intelligent Tiger Series

▸ 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)

▸ Ethernet, USB, RS-485, RS-232 options (ASCII, Modbus)

▸ Analog Outputs available (single or dual mA/DCV)

▸ PC utility for custom meter configuration/setup

▸ 5, 6 and 8 Digit Display in multiple DIN case sizes available

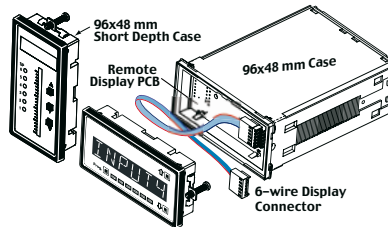▸ Texmate BASIC structured text language for Custom Applications

CE | RoHS COMPLIANT | MADE IN U.S.A. | c UL us LISTED E469078

SCADA | PLC | Texmate Data Server on your computer

RS-485 port | Ethernet

Shop

TI Series Transmitters / Micro PLC

Tiger Transmitters with Optional HMI Touch Screen Display

NEW

Optional Ultra-Short Depth Remote Display

96x48 mm Short Depth Case

Remote Display PCB

96x48 mm Case

6-wire Display Connector

144x72mm 9/32 DIN

99999

GI-50

96x24mm1/16 DIN

30-MIN

BI-60A

99999.99 HI ALARM

DI-802XA

INPUT4

DI-60A

999999

DI-60X

36x144mm 9/64 DIN

Temperature (°F) 320.0
Temperature Setting (°F) 320.0
ZONE Setting (%) 100
ZONE

DI-503

99999

PUMP 1
PUMP 2
PUMP 3
TARE
TEMP 1
LEVEL

DI-50AN6

99999

DI-50B51

999999

DI-60

TxMATE

DI-60A5C

FI-B101D50

Optional Custom Faceplate Design

99999

DI-50

999999 INPUT4

DI-602A5C

96x48mm1/8 DIN
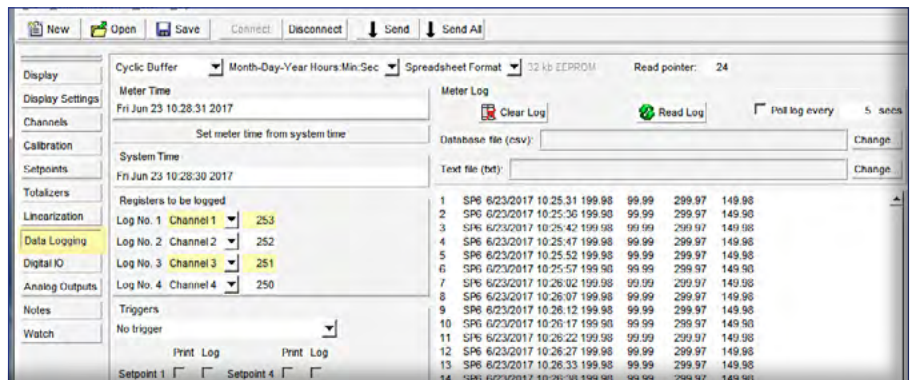
Reliable, powerful and intelligent, 5 to 8 digit Edge Programmable Meter Controller (Micro PLC) with over **140** single, dual, triple and quad modular input signal conditioners; over **30** I/O outputs including analog, serial, ethernet and relays; advanced configuration software and custom apps for your smart IIoT metering and control applications.

Embedded Application Software Includes:

- Up to 4 input channels with cross channel math (A+B, A-B, AxB, A/B) between CH1& CH2 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
- 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
- Set Tare, Reset Tare for Batching and Weighing
- 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
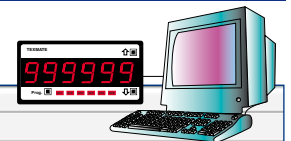

15 year lithium battery
Real-time Clock for printing, data logging and activating a setpoint or control action at fixed times of the hour, day, week, month or year.
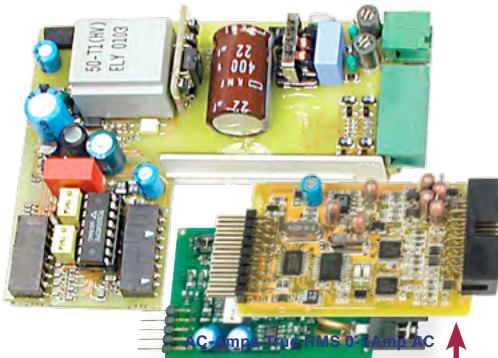
Confinguration & Programming the meter from a PC
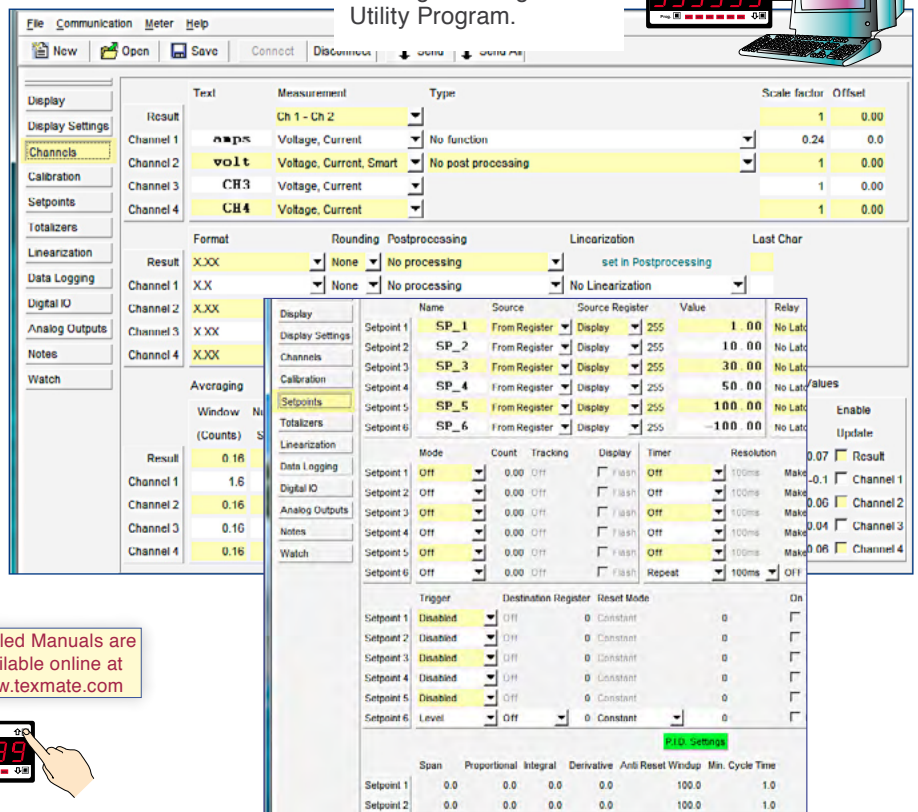
with Texmate's easy to use Tiger Configuration Utility Program.

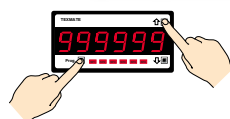## Over 140 Different Input Signal Conditioners to choose from

- 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 I^{2}C Bus outputs are available to suit almost any application.
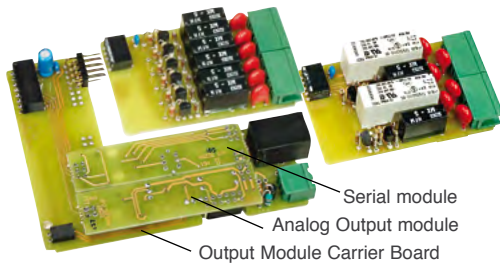

Programmable Front Panel Controls

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.
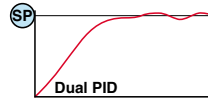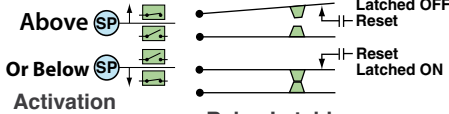
Detailed Manuals are available online at www.texmate.com

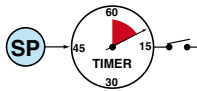## 6 Super Smart Setpoints - 8 Selectable Functions - 7 Programmable Timer Modes

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

SP

Dual PID

Serial module
Analog Output module
Output Module Carrier Board

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 45 15 30

Single & Multiple
Activation Timers

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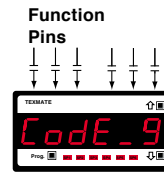### Auto-sensing AC/DC Power Supply
• Standard 85-265 VAC / 95-300 VDC
• Optional Low Voltage 15-48 VAC /10-72 VDC

Scrolling Annunciator 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

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.

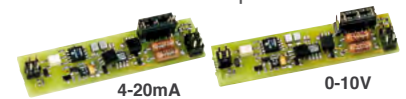### Up to 22 Opto-Isolated I/Os Plug-in Module

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
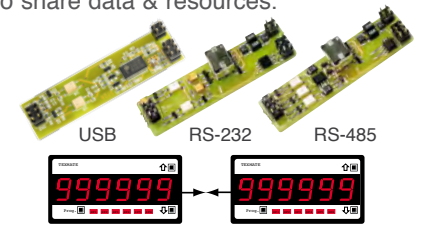
Fully Programmable with custom applications

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

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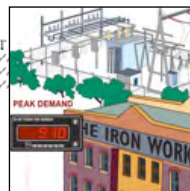
USB   RS-232   RS-485

TEXMATE 999999   TEXMATE 999999

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.
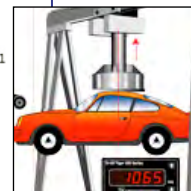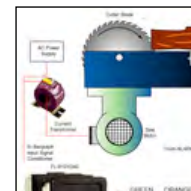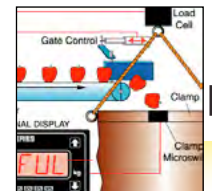
```
73
74  ELSIF &TIMER1 >= &Time THEN
75
76      &VALLEY = 0
77      &PEAK = 0
78      &TIMER1 = 0
79      GOSUB LEDS OFF
...
89
90  IF &STATE = 0 AND &EDIT_STATE = 0 THEN
91
92      IF |PROG_BUTTON = ON THEN
93
94          IF &TIMER2 > PROG_TIMEOUT THEN
95
96              EDIT &Time
97              GOSUB LEDS_ON
98              &CURRENT_DISPLAY_FORMAT
99              &EDIT_MAX = 36000
100             &EDIT_MIN = 2
101             &EDIT_DEF = 30
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
```

App 44
Peak Demand

App 41
Weighing with
Tare Zero Offset

App 15
AC Current
Measurement
Load Control

App14
Bag Filling
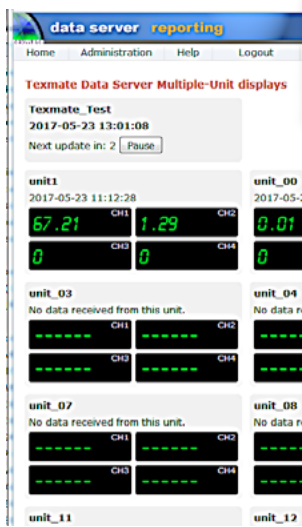Machine using
Load Cell Input

More

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

Texmate Intelligent Tiger Series

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.
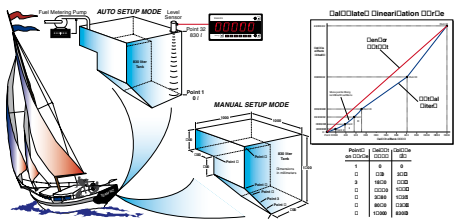
Custom applications for your smart metering and smart control industrial processes
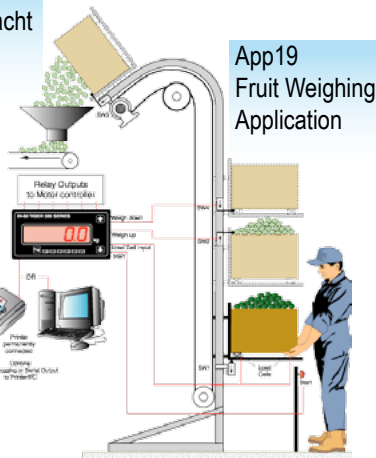
Texmate Data Server (PC-based meter server with multiple meter viewer, meter-to-meter data exchange, alarm emails, and historian database, requires Texmate Custom Application to be installed)

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

1934 Kellogg Ave. Carlsbad CA 92008

- For ordering info call:...... 1-800-TEXMATE (800-839-6283)
- For tech assistance call: (760) 598-9899
- Email: orderss@texmate.com