

Texmate Intelligent Panel Meters

TIGER FAMILY

Intelligent Meter Controllers with Programmable Logic, Digital Signal Processing Capabilities & Serial Communication



▲ **DI-50E**
1/8 DIN 96X48mm



▲ **DI-60AE**



▲ **GI-50E**
9/32 DIN 144x72mm



▲ **DI-60E**
1/8 DIN 96X48mm

LEOPARD FAMILY

Smart, Programmable Meter Relays with Isolated Retransmit or Control Loop Outputs



1/8 DIN 96X48mm
▲ **DL-40 LR**



▼ **DL-40**



▲ **BL-40**
1/16 DIN 96X24mm

LYNX FAMILY

Configured for Direct Connection to Most Sensors and Process Signals, with Displays Scalable to Any Unit of Measure



1/8 DIN
96X48mm

▲ **DX-35 LR**



▲ **DX-35**



▲ **DX-40 LR**



▲ **DX-45**

1/16 DIN
96X24mm



▲ **BX-35**



▲ **BX-45**

Tiger Family Features

[Configure a Tiger Meter](#)

- Intelligent and super-intelligent digital meters
- Front-panel digital calibration and function selection
- Built-in linearization function, 32 to 125 flexible points
- Built-in sensor excitation voltage 5 V / 10 V / 24 V DC
- Six 5A relays or combinations of 10A relays and 5A relays
- Built-in memory for maximum and minimum readings
- Over 75 signal conditioners, single as well as dual inputs
- Two high-resolution, independently programmable 16-bit analog outputs
- Built-in timer and totalizer (signal integration) inputs, plus user-definable macros and real time clock
- Choice of serial communications – RS232, RS485, Ethernet, ASCII, Modbus and direct drive printer output
- Auto-sensing AC / DC, wide range 85-265 V AC / 95-370 V DC or 15-48 V AC / 10-72 V DC power supply
- Digital “smart” filtering
- Computer programmable
- Data logging up to 7000 samples

Leopard Family Features

[Configure a Leopard Meter](#)

- Smart 4-digit meters
- Front-panel digital scaling, offset, and setpoints
- Over 38 different signal conditioners
- Dual 10 and 5-amp relays, 4 relays total plus analog output
- 1/16 DIN meters have 2 or 3 relays or 1 relay plus analog output
- Auto-sensing AC / DC, wide range 85-265 V AC / 95-370 V DC, or 15-48 V AC / 10-72 V DC power supply

Lynx Family Features

[Configure a Lynx Meter](#)

- Basic indicator 3.5, 4 or 5 digit, 0.56” and 0.8” LED meters
- Analog scaling and offset from rear
- Over 24 single-input signal conditioners available
- Auto-sensing AC / DC, wide range 85-265 V AC / 95-370 V DC, or 15-48 V AC / 10-72 V DC power supply

SPECIFICATIONS

Tiger Meter Specifications

Accuracy: Built-in compensation and linearization functions enable system accuracies of the order of $\pm 0.0001\%$ of reading for analog inputs. Stop - Start time resolution from $\pm 1\text{sec}$ to $\pm 0.7\text{nsec}$. Digital input and pulse counts ± 1 count.

A/D Convertors: A Dual Slope, bipolar 17 bit A/D is provided as standard on the main board. SMART modules have 24 bit or 16 bit Delta-Sigma A/D convertors that utilize the internal I²C BUS.

Temperature Coefficient: Typically 30ppm/°C. Compensation can be utilized to achieve system temperature coefficients of 1ppm.

Warm Up Time: Up to 10 minutes, depending on input module.

Conversion Rate: Typically 10 samples per second. However, SMART input modules are available that can convert at 60, 240, 480 or 960 samples per second.

Control Output Rate: Can be selected for 100msec or 10msec. Some SMART modules have SSR outputs that react within 1.2msec.

Excitation Voltage: Depends on input module selected. Typically, 5V, 10V or 24VDC is provided.

Operating Temperature: 0 to 50 °C (32 °F to 122 °F).

Storage Temperature: -20 °C to 70 °C (-4 °F to 158 °F).

Relative Humidity: <95% (non-condensing) at 40 °C (104 °F).

Case Options: NEMA 4X Lens cover
Metal case surround
Panel Adapters

Texmate Intelligent Panel Meters

Leopard Meter Specifications

A/D Converter:	14 bit single slope
Accuracy:	±(0.05% of reading + 2 counts)
Temperature Coefficient:	100 ppm/°C (Typical)
Warm Up Time:	2 minutes
Conversion Rate:	5 conversions per second (Typical)
Operating Temperature:	0 to 60°C, <95% (non condensing)
Storage Temperature:	-20°C to 70°C

Lynx Meter Specifications

A/D Converter:	12 bit dual slope
Accuracy:	±(0.05% of reading + 2 counts)
Temperature Coefficient:	100 ppm/°C (Typical)
Warm Up Time:	2 minutes
Conversion Rate:	3 conversions per second (Typical)
Operating Temperature:	0 to 60°C, <95% (non condensing)
Storage Temperature:	-20°C to 70°C

ORDERING INFORMATION

To Order—Insert Number Code for Each Letter to Select Catalog Number.
Order Example: DI-50E-DR-PS1-IA01-IAC-S2-R1

Basic Unit **A** - **B** - **C** - **D** - **E** - **F** - **G**

TIGER FAMILY METER SELECTION

A	DI-50E	Intelligent Modular, 32 pt Linear, Analog out & relays
	DI-60AE	Intelligent Modular, Alpha Numeric 6 digit 0.56" LED
	DI-60E	Intelligent Modular, Numeric 6 digit 0.56" LED
	GI-50E	Intelligent Modular, w/ 5 digit 1" LED
B	Display	
	DR	Red LED
	DG	Green LED
	DB	Super-bright Red LED
C	Power Supply	
	PS1	85-265VAC/95-370VDC
	PS2	15-48VAC/10-72VDC
D	Input Modules - See Input Module List "T" Items	
E	Output Options	
	AIC	Isolated 4 to 20 mA Analog Output
F	Serial Communications	
	S2	Isolated RS-232 communication + ASCII
	S4	Isolated RS-485 communication + ASCII
	S5	Isolated ModBus Compatible + ASCII
	S9	Ethernet Modbus TCP/IP
	Relays	
G	R1	Single 5A Form A Relay
	R2	Two 5A Form A Relays
	R6	Six 5A Form A Relays
	R13	Two 10A Form C Relays, One 5A Form A Relay
	R14	Two 10A Form C Relays, Two 5A Form A Relays

LEOPARD FAMILY METER SELECTION

A	BL-40	4.0 digit, Modular, Low Profile, Half Height Case
	BL-40H	4.0 digit, Thermocouple & RTD, Half Height Case
	DL-40	4.0 digit, Modular, 1/8 DIN case
	DL-40H	4.0 digit, Thermocouple & RTD, 1/8 DIN Case
B	Display	
	DR	Red LED, 0.56 inch high
	DG	Green LED, 0.56 inch high
	DB	Super bright LED, 0.56 inch high
	LG	Large Green LED, 0.8 or 1 inch high
	LR	Large Red LED, 0.8 or 1 inch high
C	Power Supply	
	PS1	85-265VAC/95-370VDC
	PS2	15-48VAC/10-72VDC
D	Input Modules - See Input Module List "L" Items	
E	Output Options	
	AIC	Isolated 4 to 20 mA Analog Output
F	Relays	
	R1	Single 10A Form A Relay
	R2	Two 10A Form A Relay
	R3	Two 10A Form A Relays, One 5A Form A Relay
	R4	Two 10A Form A Relays, Two 5A Form A Relays

LYNX FAMILY METER SELECTION

A	BX-35	3.5 Digit Universal Power Supply, 1/16 DIN Case
	BX-45	4.5 Digit Universal Power Supply, 1/16 DIN Case
	DX-35	3.5 Digit Universal Power Supply, 1/8 DIN Case
	DX-40	4 Digit Universal Power Supply, 1/8 DIN Case
	DX-45	4.5 Digit Universal Power Supply, 1/8 DIN Case
B	Display	
	DR	Red LED
	DG	Green LED
	DB	Super-bright Red LED
	LG	Large Green LED, 0.8 inch high
C	Power Supply	
	PS1	85-265VAC/95-370VDC
D	Input Modules - See Input Module List "LY" Items	
	PS2	15-48VAC/10-72VDC
E	Output Options	
	AIC	Isolated 4 to 20 mA Analog Output
AIV	Isolated 0 to 10VDC Analog Output	

INPUT MODULE SELECTION

Function	Module	For
AC		
AC 1A, Scaled RMS	IA04	T,L,Ly
AC 5A, Scaled RMS	IA05	T,L,Ly
AC 1A, True RMS	IA09	T,L,Ly
AC 5A, True RMS	IA11	T,L,Ly
AC 2/20/200mA, Scaled RMS	IA03	T,L,Ly
AC 2/20/200mA, True RMS	IA08	T,L,Ly
AC 100mV, Scaled RMS	IA10	T,L,Ly
AC 100mV, True RMS	IA12	T,L,Ly
AC 200/600V, Scaled RMS	IA01	T,L,Ly
AC 200mV/2V/20V, Scaled RMS	IA02	T,L,Ly
AC 200/600V, True RMS	IA06	T,L,Ly
AC 200mV/2V/20V, True RMS	IA07	T,L,Ly
DC		
DC 5A	ID04	T,L,Ly
DC 1A	ID09	T,L,Ly
DC 2/20/200mA w/ 24V Exc.	ID03	T,L,Ly
DC 2/20/200mA w/ Offset & 24V Exc.	ID07	T,L,Ly
DC 20/50/100/200mV w/ Offset & 24V Exc.	ID02	T,L,Ly
DC 2/20/200V/Custom w/ 24V Exc.	ID01	T,L,Ly
DC 2/20/200V/Custom w/ Ext. Decimal Select	ID06	T
DC 2/20/200V/Custom w/ External LIN Table Select	ID08	T
DC 2/20/200V/Custom w/ Offset & 24V Exc.	ID05	T,L,Ly
DC Watts, 200V & 50mV from shunt	IW03	T
DC 2V and 3-wire RTD	IDT3	T
Dual DC 2mA	IDD3	T
Dual DC 50mV	IDD2	T
Dual DC 2V	IDD1	T
DC 50mV and 4-20mA	IDD6	T
DC 2V and 4-20mA	IDD5	T
DC 2V and 50mV	IDD4	T
DC 50mV and JKRSTBN Thermocouple	IDT5	T
DC 2V and JKRSTBN Thermocouple	IDT4	T
DC 1-5V Process w/ Offset & 24V Exc.	IPO3	T,L,Ly
DC 2/5/10/20V/2/20mA + 3 Digital Inputs	IP10	T
Triple DC 50mV	ITD2	T
Triple DC 2V	ITD1	T
DC 50mV and 50mV and JKRSTBN T/C	ITT6	T
DC 50mV and 2V and JKRSTBN T/C	ITT9	T
DC 2V and 2V and JKRSTBN T/C	ITT7	T
DC 50mV and two JKRSTBN T/C	ITT5	T
DC 2V and two JKRSTBN T/C	ITT3	T
DC Volts and T/C and Frequency	ITTG	T
Quad DC 50mV	IQD2	T
Quad DC 2V	IQD1	T
RTD + DC V + DC V + Frequency	IQT5	T
Smart DC V, 16 bit, 1 to 800 Hz update rates	ISD1*	T
Smart DC V, 16 bit, 1 to 960 Hz update rates	ISD2**	T
Smart DC V, 16 bit, 1 to 800 Hz w/dual SSRs	ISD3*	T
Smart DC V, 16 bit, 1 to 960 Hz w/dual SSRs	ISD4**	T
Smart DC V, High Res & Acc, 24 bit 1-400Hz	ISD5*	T
Smart DC V, High Res & Acc, 24 bit 1-480Hz	ISD6**	T
Smart DC V, High Res & Acc, 1-400Hz w/dual SSRs	ISD7*	T
Smart DC V, High Res & Acc, 1-400Hz w/dual SSRs	ISD8**	T
Smart Dual 3-wire Potentiometer (50 Hz)	ISR3*	T
Smart Dual 3-wire Potentiometer (60 Hz)	ISR4**	T
Smart Dual DC Volts, 16 bit, 1-20Hz update	ISDA*	T
Smart Dual DC Volts, 16 bit, 1-20Hz update	ISDB**	T
Smart Load Cell and RTD	ISSB	T
DC Process 2/5/10/20/200V/2/20mA w/ 24V Exc.	IPO7	T,L
DC Process 2/5/10/20/200V/2/20mA w/ 24V Exc & AutoCal	IPO8	T

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INPUT MODULE SELECTION - CONTINUED

Function	Module	For
COUNTER		
Quadrature Counter	IC02	T
Quadrature Counter w/dual SSRs	IC03	T
Universal Freq./ RPM / Up Down Counter	IF10	T
Dual UP/DOWN Counter	IDC1	T
Counter and T/C and 4-20mA	ITTF	T
Smart Dual Counter and Pressure Direct	ISP1	T

Function	Module	For
DUAL INPUTS		
3-wire RTD and DC V	IDT3	T
3-wire RTD and 4-20mA	IDP2	T
Dual DC 2mA	IDD3	T
Dual DC 50mV	IDD2	T
DC 50mV and 4-20mA	IDD6	T
DC 2V and 4-20mA	IDD5	T
DC 2V and DC 50mV	IDD4	T
Strain Gage and Frequency	IDS3	T
Dual DC 2V	IDD1	T
Dual Direct Pressure (Abs. or Differential/Gage)	IGY	T
Dual Frequency	T	
Dual Pressure Input	T	
Dual Process Loop	T	
Dual Resistance Input	T	
Dual RTD Input	T	
Dual Smart Pressure/Load Cell, 16 bit	T	
Dual Smart Pressure/Load Cell, 16 bit	T	
Dual Strain Gage Input	T	
Dual Thermocouple	T	
Thermocouple and 4-20mA	T	
Thermocouple and DC mV	T	
Thermocouple and DC V	T	
Thermocouple and Load Cell	T	
Dual UP/DOWN Counter	T	
Smart Dual 3-wire Potentiometer	T	
Smart Load Cell and Process (4-20mA)	T	
Smart Dual DC Volts, 16 bit, 1-20Hz update	T	
Smart Dual DC Volts, 16 bit, 1-20Hz update	T	
Smart Dual Photo Diode Input	T	
Smart Dual RTD (50Hz)	T	
Smart Dual RTD (60Hz)	T	

Function	Module	For
4-20mA		
3-wire RTD and 4-20mA	T	
DC 50mV and 4-20mA	T	
DC 2V and 4-20mA	T	
Dual Process Loop	T	
Thermocouple and 4-20mA	T	
Process Loop 4-20mA	T,L,Ly	
Process Loop 4-20mA w/ Ext. Lin Table	T,L,Ly	
Process Loop 4-20mA w/ 24V Exc. & AutoCal	T	
Process Loop 4-20mA w/ 24V Exc.	T,L,Ly	
Quad 4-20mA	T	
Smart Load Cell and Process 4-20mA	T	
Triple 4-20mA	T	
4-20mA and 4-20mA and T/C	T	
T/C and 4-20mA and Counter	T	
T/C and 4-20mA and DC mV	T	
T/C and 4-20mA and DC Volts	T	
T/C and 4-20mA and Frequency	T	
T/C and T/C and 4-20mA	T	

Function	Module	For
FREQUENCY / RPM		
Universal Freq./ RPM / Up Down Counter	T	
Universal Frequency / RPM	L	
Line Frequency	L	
Line Frequency	T	
Dual Frequency	T	
Strain Gage and Frequency	T	
RTD and RTD and Frequency	T	
T/C and 4-20mA and Frequency	T	
T/C and DC Volts and Frequency	T	
RTD + DC V + DC V + Frequency	T	

Function	Module	For
LVDT		
Smart Dual LVDT (50 Hz)	T	
Smart Dual LVDT (60 Hz)	T	

Function	Module	For
OXIDATION REDUCTION POTENTIAL		
Oxidation Reduction Potential (ORP)	T	

Function	Module	For
pH		
pH	T	
pH w/ Automatic Temperature Compensation	T	

Function	Module	For
POTENTIOMETER		
3-wire Potentiometer 1kΩ min.	T,L,Ly	
Linear Potentiometer 1kΩ min.	T,L	
Smart Dual 3-wire Potentiometer (50 Hz)	T	
Smart Dual 3-wire Potentiometer (60 Hz)	T	
Smart Quad Potentiometer/Resistance	T	
Smart Single 3-wire Potentiometer (50 Hz)	T	
Smart Single 3-wire Potentiometer (60 Hz)	T	

Function	Module	For
PRESSURE / LOAD CELL		
Universal Direct Pressure	T,L,Ly	
Direct Pressure with 2 Digital Inputs	T	
Dual Direct Pressure (Abs. or Differential/Gage)	T	
Dual Pressure Input	T	
Dual Smart Pressure/Load Cell, 16 bit	T	
Dual Smart Pressure/Load Cell, 16 bit	T	
Pressure/Load Cell 20/2mV/V, 5/10V Exc, 4-wire	T,L,Ly	
Pressure/Load Cell Ext Exc., 20/2mV/V, 4-wire	T,L,Ly	
Pressure/Load Cell Ext Exc., High Impedance	T,L	
Pressure/Load Cell Ext Exc., 4/6-wire	T,L	
Pressure/Load Cell w/ AutoCal, 4-wire	T	
Pressure/Load Cell, 4/6-wire	T,L	
Smart Pressure/Load Cell, Standard Res 16 bit	T	
Smart Pressure/Load Cell, Standard Res 16 bit	T	
Smart Pressure/Load Cell, High Res & Acc 24 bit	T	
Smart Pressure/Load Cell, High Res & Acc 24 bit	T	
Smart Quad Pressure/Load Cell (50 Hz)	T	
Smart Quad Pressure/Load Cell (60 Hz)	T	
Smart Pressure Direct & Dual Counter	T	
Smart Load Cell and Process 4-20mA	T	
Smart Load Cell and RTD	T	
Smart Load Cell and Two Digital Inputs	T	
Smart Load Cell and Two Digital Inputs	T	
Thermocouple and Load Cell	T	

Function	Module	For
PROCESS LOOP		
Dual Process Loop	T	
Process Loop 4-20mA	T,L,Ly	
Process Loop 4-20mA w/ Ext. Lin Table	T	
Process Loop 4-20mA w/ 24V Exc. & AutoCal	T	
Process Loop 4-20mA w/ 24V DC Exc.	T,L,Ly	

Function	Module	For
QUAD INPUTS		
Quad 4-20mA	T	
Quad DC 50mV	T	
Quad DC 2V	T	
Quad RTD Platinum 2 wire connection	T	
Quad RTD Platinum 4 wire connection	T	
RTD + DC V + DC V + Frequency	T	
Smart Quad Potentiometer/Resistance	T	
Smart Quad Pressure/Load Cell (50 Hz)	T	
Smart Quad Pressure/Load Cell (60 Hz)	T	
Smart Quad Thermocouple (50 Hz)	T	
Smart Quad Thermocouple (60 Hz)	T	

Function	Module	For
RESISTANCE		
Dual Resistance 0.2/2/20kΩ	T	
Resistance 200/2k/20kΩ, 2/3/4-Wire	T	
Resistance 2kΩ	L	
Resistance 2kΩ	Ly	
Smart Quad Potentiometer/Resistance	T	
Smart Voltage and Resistance	T	

Function	Module	For
RTD		
3-wire RTD and DC V	T	
3-wire RTD and 4-20mA	T	
Dual RTD	T	
Quad RTD Platinum 2 wire	T	
Quad RTD Platinum 4 wire	T	
RTD + DC V + DC V + Frequency	T	
RTD, 100Ω Copper 2/3/4-wire	T	
RTD, 100Ω Pt. 2/3/4-wire	T	
RTD, 100Ω Pt. 2/3/4-wire (-199.9 to 199.9 °C)	T,L,Ly	
RTD, 100Ω Pt. 2/3/4-wire (-199.9 to 199.9 °F)	T,L,Ly	
RTD, 100Ω Pt. 2/3/4-wire (-200 to 800 °C)	T,L,Ly	
RTD, 100Ω Pt. 2/3/4-wire (-200 to 1470 °F)	T,L,Ly	
RTD, 100Ω Pt. 3/4-wire, °C/°F, 1°/0.1°	L	
RTD, 120Ω Nickel 2/3/4-wire	T	
RTD, 1000Ω Pt. Select 3/4-wire, °C/°F, 1°/0.1°	L	
Smart Load Cell and RTD	T	
Smart Dual RTD (50Hz)	T	
Smart Dual RTD (60Hz)	T	
Smart 6 Input - 3 RTD, 2 Process, 1 Digital	T	
Smart 6 Input - 3 RTD, 2 Process, 1 Digital	T	
Triple RTD Platinum 100Ω, 4-wire	T	

Function	Module	For
Triple RTD Platinum 100Ω, 2-wire	T	
RTD and RTD and Frequency	T	

Function	Module	For
SINGLE PHASE POWER		
Single Phase Power, 300V/1A	T	
Single Phase Power, 300V/5A	T	
Single Phase Power, 600V/1A	T	
Single Phase Power, 600V/5A	T	

Function	Module	For
STRAIN GAGE		
Strain Gage and Frequency	T	
Dual Strain Gage	T	
Strain Gage	T,L	

Function	Module	For
THERMOCOUPLE		
Dual Thermocouple JKRSTBN	T	
T/C JKRSTBN and 4-20mA	T	
T/C JKRSTBN and DC 50mV	T	
T/C JKRSTBN and DC 2V	T	
Thermocouple and Load Cell	T	
Smart Quad Thermocouple (50 Hz)	T	
Smart Quad Thermocouple (60 Hz)	T	
Thermocouple JKRSTBN	T	
T/C, JKRT, Selectable °C/°F, 1°/0.1°	L	
T/C JKRSTBN, 4-20mA and 4-20mA	T	
T/C JKRSTBN, 4-20mA and Counter	T	
T/C JKRSTBN, 4-20mA and DC 50mV	T	
T/C JKRSTBN, 4-20mA and DC 2V	T	
T/C JKRSTBN, DC 50mV and DC 50mV	T	
T/C JKRSTBN, DC 2V and DC 50mV	T	
T/C JKRSTBN, DC 2V and DC 2V	T	
T/C JKRSTBN, T/C and 4-20mA	T	
T/C JKRSTBN, T/C and DC 50mV	T	
T/C JKRSTBN, T/C and DC 2V	T	
T/C, 4-20mA and Frequency	T	
T/C, DC Volts and Frequency	T	
Triple Thermocouple JKRSTBN	T	

Function	Module	For
TRIPLE INPUTS		
Smart Load Cell and Two Digital Inputs	T	
Smart Load Cell and Two Digital Inputs	T	
Smart Pressure Direct & Dual Counter	T	
Triple 4-20mA	T	
Triple DC 50mV	T	
Triple DC 2V	T	
Triple RTD Platinum 100Ω, 4-wire	T	
Triple RTD Platinum 100Ω, 2-wire	T	
RTD and RTD and Frequency	T	
T/C JKRSTBN, 4-20mA and 4-20mA	T	
T/C JKRSTBN, 4-20mA and Counter	T	
T/C JKRSTBN, 4-20mA and DC 50mV	T	
T/C JKRSTBN, 4-20mA and DC 2V	T	
T/C JKRSTBN, DC 50mV and DC 50mV	T	
T/C JKRSTBN, DC 2V and DC 50mV	T	
T/C JKRSTBN, DC 2V and DC 2V	T	
T/C JKRSTBN, T/C and 4-20mA	T	
T/C JKRSTBN, T/C and DC 50mV	T	
T/C JKRSTBN, T/C and DC 2V	T	
T/C, 4-20mA and Frequency	T	
T/C, Volts and Frequency	T	
Triple Thermocouple JKRSTBN	T	

*Optimized for 50 Hz rejection. **Optimized for 60 Hz rejection.

ENHANCED TIGER FAMILY MODELS



DI-503
Triple Display Meters



Digital Meter with Annunciators
DI-50/AN6



DI-602A
Dual Display Meters



DI-802X
Dual Line Alphanumeric LCD