TiTAN®

Multi Function Meter | Power Monitoring Unit

Multi Function Meter | Power Monitoring Unit
Titan 200 | 300 | 400 series

TiTAN®

The Titan is a compact, smart Power Monitoring Unit that tracks over 68 electrical parameters, including voltage, current, and power quality with THD and harmonic analysis up to the 31st order. With Transient Analysis, built-in scheduling, and PLC functionality, it enables proactive energy management and process automation. Supporting WiFi, BLE, and RS485, it ensures seamless integration into IoT and industrial systems, while its robust, user-friendly design ensures reliability in demanding environments.

Applications

- Industrial and industrial sub-metering and Energy Management System (EMS) applications
- Building management and monitoring systems (BMS)
- Power Control Centre (PCC) panels
- Motor Control Centre (MCC) panels
- High, medium and low-voltage switchgear panels
- Control and relay panels
- Relaying and control outputs

Industries

Manufacturing

Oil and Gas

Process Industries

Data Centres and IT Facilities

Commercial Buildings and Infrastructure

Benefits

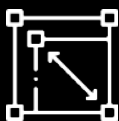Reduced measurement errors, ensuring precise energy management

Improved system performance and compliance through detailed power quality

Prevention of costly downtime by identifying power quality events with advance transient

Easy integration into existing systems with multi-protocol connectivity

Compact design reduces hardware requirements and installation time

Streamlined operations with RTC scheduling and I/O controls

Simplified setup and management with push-button programming and remote access

Complete traceability with time-stamped event logs for compliance and audits

Key features
Titan 200 | 300 | 400 Series

68 Parameters
Tracks 68 electrical parameters including voltages, power factors, and harmonics for real-time monitoring

Built in Wi-Fi with native connectivity
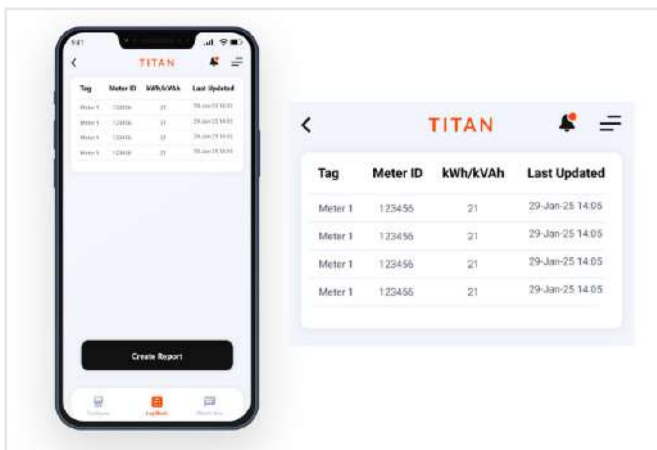Supports WiFi, BLE, RS485, and Ethernet to enable seamless IoT and cloud integration

Advance transient analysis
Event-based analysis captures detailed 30-second snapshots for root-cause investigation
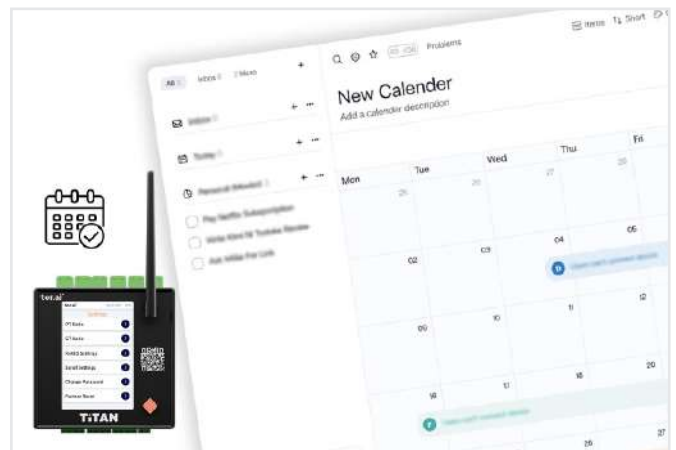

TFT Display | Compact design
Features a 3.5" TFT screen that provides real-time data visualization and historical trends

Digital logbook
Eliminate manual data logging with Tor Titan mobile app which automatically syncs the energy consumptions data

Built in scheduling
Includes digital inputs/outputs and RTC functionality for schedule-based automation and event triggers

Tor Titan
Revolutionizing Power Management

TiTAN®

400 Series

411
Meter with display with RS-485, BLE,
Wi-Fi and I/Os with Transient analysis

300 Series

311
Meter with display and RS-485

312
Meter with display with RS-485,
BLE and Wi-Fi

313
Meter with display with RS-485,
BLE, Wi-Fi and I/Os

200 Series

211
Meter without display with
RS-485

212
Meter without display with
RS-485, BLE and Wi-Fi

Technical specification
Titan 200 | 300 | 400 series

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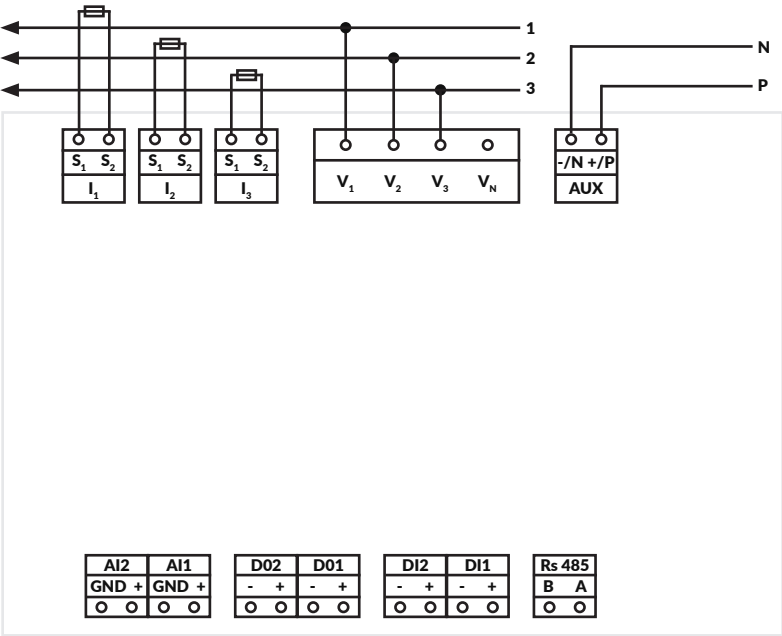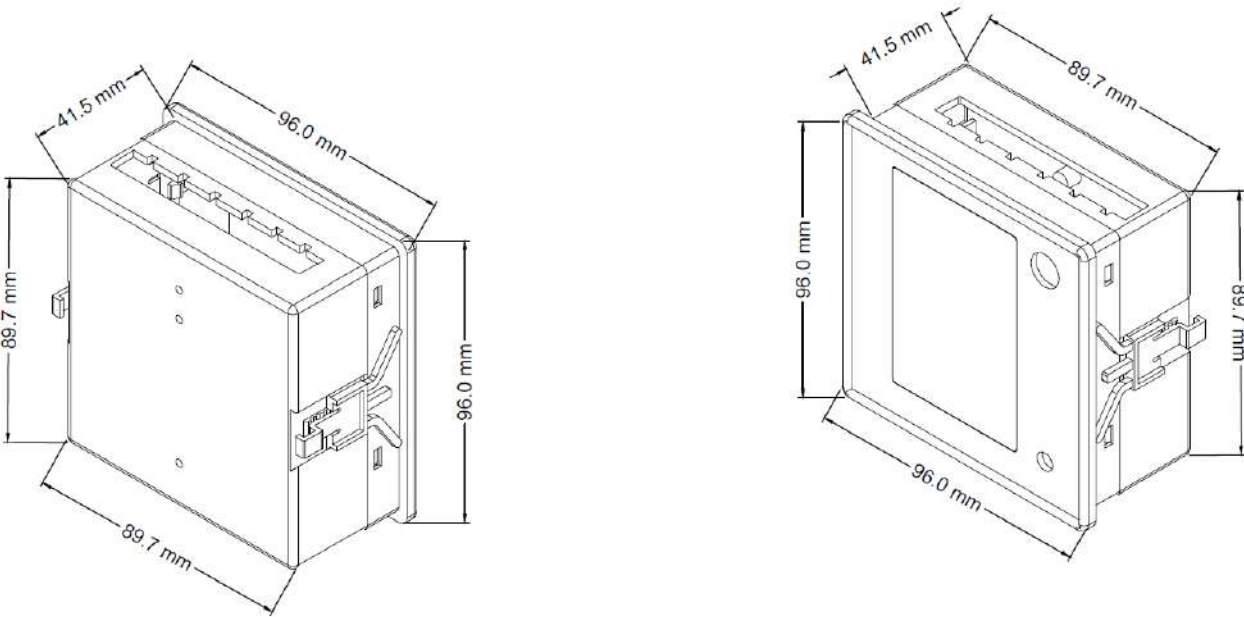|	211	212	311	312	313	411
Electrical						
Voltage range	180V - 450V (AC 3 Phase 4 wire, 3 phase 3 wire)					
Aux power supply range	180V - 450V AC supply					
Current range	5.0A					
Frequency	45Hz - 65Hz					
Accuracy class	0.5S					
Short time over current	200% for 10 Sec					
Compliance						
Standards	IS 14697, IS 13779, IEC62052-11, IEC62053-22, IEC62053-23, IEC 61010, IEC 62053-31					
Mechanical						
Dimensions (W*H*D)	96*96*41 mm					
Weight	0.5Kg					
Enclosure	Polycarbonate					
Terminals	Plug In					
Mounting	Panel Mounting, Din rail (Optional)					
Environmental						
IP	IP54(front facia) ; IP 20 (at terminals)					
Insulation	4KV RMS 50 HZ, 1 Min					
Impluse withstand	6 KV					
Operating Temp	10 to 60 deg C					
Storage Temp	0 to 80 deg C					
Humidity	95% RH					
Communication						
Modbus	RS 485					
Baudrate	9600 to 115200 settable					
WiFi	NA	IEEE 802.11 Wireless network	NA	IEEE 802.11 Wireless network		
BLE (Bluetooth Low Energy)	NA	BLE 5.0	NA	BLE 5.0		
CT/VT	Configurable via RS485			Configurable through Joystick and BLE		
Interfaces						
Analogue Input	NA					2 (0-500 ohms and 4-20mA)
Digital Input	NA					2
Digital output	NA					2
Counter Input (0-1000 Hz)	NA					1 (based on DI)
Hour Meter	NA					3 (1 voltage based, 1 current based, 1 DI based)
Display						
Screen	NA		Colour TFT 3.5 inch (320*480)			
Additional Features						
Transient Analysis over WiFi	NA					1 sample @20 msec over WIFI R,Y,B phase voltages R,Y,B phase currents Phase wise power factor Phase wise Vthd Phase wise Ithd
Titan mobile app	NA	Android and iOS	NA	Android and iOS	Android and iOS	Android and iOS

Features
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Features	200 series		300 series			400 series
	211	212	311	312	313	411
Voltage & current metrics (PN Voltage, PP Voltage, Line Currents, Avg Voltages/ Currents)	■	■	■	■	■	■
Real-time power metrics (Active, Reactive, Apparent Power, Total and Phase-wise metrics)	■	■	■	■	■	■
Comprehensive Energy metrics (Active Total Import/Export, Reactive (Q1+Q2)/ (Q3+Q4), Apparent Energy)	■	■	■	■	■	■
Power Quality monitoring (Phase-wise THD Voltage, THD Current, THD Power)	■	■	■	■	■	■
RPM Monitoring with Frequency and unbalance detection (Voltage/ Current)	■	■	■	■	■	■
Historical Data Tracking (Cumulative MD, Min/Max values)	■	■	■	■	■	■
Phase-wise and Average Power Factor	■	■	■	■	■	■
Feeder Interruption tracking (When Auxiliary Supply is Off)	■	■	■	■	■	■
Overload protection for short durations	■	■	■	■	■	■
Modbus RTU Communication (RS 485)	■	■	■	■	■	■
Accuracy class 0.5S	■	■	■	■	■	■
Multi-Parameter Hour Meters (Voltage, Current & DI-based)	■	■	■	■	■	■
App for Configuration	■	■	■	■	■	■
Web and Mobile App	■	■	■	■	■	■
Power On/Off & Load On/Off Hours tracking					■	■
WiFi-based reports, alerts & analytics (Voltage, Current, Power Factor, Vthd, Ithd)		■		■	■	■
High-res color TFT display			■	■	■	■
Analog Inputs - Dual					■	■
Digital Inputs - Dual					■	■

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Connection diagram

S₁ S₂	S₁ S₂	S₁ S₂	V₁ V₂ V₃ Vₙ
I₁	I₂	I₃	

-/N +/P
AUX

AI2	AI1	D02	D01	DI2	DI1	Rs 485
GND +	GND +	- +	- +	- +	- +	B A

Mechanical dimensions

Capabilities

1 RnD

Technology refinement by 100+ inhouse team of engineers and subject matter experts in embedded systems, hardware development, type testing - validation, application and platform development.

2 Application & Analytics

Expertise in developing and deploying customized applications with platform and database development along with managing infrastructure and security.

3 Manufacturing

Our hardware is manufactured in state-of-the-art pick and place setup for board building along with code burning bank for building multiple boards in parallel.

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