



MOBILE
NETWORK
COMPATIBLE

QTANIUM™ 400

Rugged GPS asset location and telematics

Purpose-built for the toughest working conditions and the harshest environments, the Qtanium 400 connects business or fleet managers with their assets. It enables mining, construction, earthmoving, and many other types of operations utilising heavy equipment, trucks, light vehicles and powered plant assets, to monitor and analyse telematics data for all of their assets in one place; either on their desktop or mobile devices.

Key solutions:



Asset location & utilisation – Know where your assets are at all times and when your assets are working, sitting idle or not in use when they should be to maximise productivity and optimise utilisation.



Maintenance tracking – Create a comprehensive, up-to-date fleet-wide picture of your maintenance schedule to maximise uptime.



Productivity and efficiency analysis – Gain a detailed, real-time and historic understanding of your operations and learn where you can achieve efficiency.



Safe operations – Monitor driver and equipment operator behaviour, identify and reward employees for practicing safe operations and manage those that need more training. Prevent theft and equipment misuse with instant alerts for out-of-hours activity.



Mixed asset and OEM data integration – Centrally manage machinery data in a unified, manufacturer-agnostic solution, gain a complete picture of telematics across your entire fleet, ensure that your data is kept confidential and for your benefit only (AEMP compatible).

Connecting equipment – IoT

Collecting data from heavy equipment and other assets is part of the Internet of Things (IoT) revolution transforming equipment management. The potential to convert data into business value is driving exponential growth in the uptake of telematics. Teletrac Navman provides a manufacturer-agnostic platform that connects any asset - empowering forward-looking businesses to utilize their data to increase productivity, reduce costs, and ultimately achieve a higher level of excellence across their operations. This means that you are not merely able to monitor your assets, now you can see activity or costs by jobsite or across all of your operations.

Product overview

Qtanium 400 is a fully weatherproof telematics device that features optional satellite and cellular communications options as well as optional connection to the asset's Engine Control Unit. The device offers a full set of fleet management features, comprehensive I/O system and expandable accessories, along with an IP67 environmental rating, giving equipment owners confidence that the Qtanium 400 will perform for the life of the asset and in the harshest conditions.

Key device features

- Ruggedised, weatherproof (IP67 rated)
- Built-in 3-axis accelerometer for driver behaviour, motion sensing, hard braking, and impact detection
- Isolated power supply
- Dual reporting 6,000 event buffered message logs to manage cellular, satellite or Wi-Fi communications channels
- Low power sleep modes
- Backup battery
- 600 live sites
- Optional Satellite Modem
- Optional ECU interface and other advanced peripherals support
- Comprehensive I/O system
- Switched power serial port

Qtanium 400 Technical Specifications

GPS

Location Technology	50 channel GPS (with SBAS SBAS: WAAS, EGNOS, MSAS, GAGAN)
Location Accuracy	2.0 metre CEP (with SBAS)
Tracking Sensitivity	-162dBm
Acquisition Sensitivity	-147dBm
AGPS Capable	

CELLULAR

Data Support	GSM/GPRS/HSPA/CDMA 1XRTT
Operating Bands:	MHz (Band)
GSM/GPRS	850/900/1800/1900
CDMA/1xRTT	800/1900
HSPA/UMTS	800(VI)/850(V)/900(VIII)/ 1700(IV)/1900(II)/2100(I)
3GPP Release 7	
Transmitter Power:	
GSM/GPRS	850/900 32.5 dBm 1800/1900 29.5 dBm
CDMA/1xRTT	800 24 dBm 1900 23 dBm
HSPA/UMTS	(all bands) 23 dBm
HSPA data rates	5.76 Mbps upload / 7.2 Mbps download
HSPA Fallback	EDGE/GPRS/GSM quad band

COMPREHENSIVE I/O

Ignition Input	1 (fixed bias)
Digital Inputs	4 (programmable bias inputs)
Digital Outputs	2 (open collector 150mA relay driver) 2 (Multi-I/O ports, 0-30VDC)
1-Wire® Interface	1 (for temperature probes)

ENVIRONMENTAL

Temperature	-30° to + 75° C (connected to primary power) -40° to + 85° C (storage)
Humidity	95% R.H. @ 50° C non-condensing
Shock and Vibration	U.S. Military Standard 202G and 801G, SAE J1455
EMC/EMI	SAE J1113
IP67 Rating	

ELECTRICAL

Operating Voltage	7-32 VDC (momentary) 9-30 VDC (start-up, operating)
Power Consumption	3mA @ 12V (deep sleep) 20mA @ 12V (idle with IP connection) 70mA @ 12V (active tracking GPS off cell enabled)
Back Up Battery	Lithium-Ion 5200mAh

CONNECTORS, SIM ACCESS

Interface Connectors	5-way power connector (5-pin) 18-way serial / 1-wire connector (18-pin) 7-way I/O connector (7-pin)
Serial Interface	(2) 2-wire RS-232 (TX/RX/Ground) (1) 4-wire RS-232 (TX/RX/RTS/CTS/Ground)

PHYSICAL

Dimensions	179.43mm(L) x 176.11mm (W) x 62.88mm (H)
Weight	1.25kgs

MOUNTING

Magnets or Bolts

CERTIFICATIONS

Pending certification FCC, CE, IC, PTCRB, GCF and Applicable Carriers

PRODUCT ACCESSORIES

18-way Qtanium shipping plug	Magellan Navigation/PND Device
Qtanium 400 5-way power cable	(M-Nav 760, 800)
Qtanium 18-way Serial/1-wire cable	Wi-Fi option
Qtanium 7-way I/O cable	Satellite option
Dallas 1-wire temperature sensors	Vehicle Bus Interface
Dallas iButton (Driver ID) reader	
Navman MDT860	

About Teletrac Navman

Teletrac Navman is a leading software-as-a-service (SaaS) provider leveraging location-based technology and services for managing mobile assets. With specialized solutions that deliver greater visibility into real-time insights and analytics, Teletrac Navman helps companies make better business decisions that enhance productivity and profitability. Its fleet and asset management technology uncovers information that would otherwise go unseen, helping customers reduce risk and confidently move their business forward with certainty. It tracks and manages more than 500,000 vehicles and assets for more than 40,000 companies around the world. The company is headquartered in Garden Grove, CA, with additional offices in the United States, United Kingdom, Australia, New Zealand and Mexico. teletracnavman.com.au