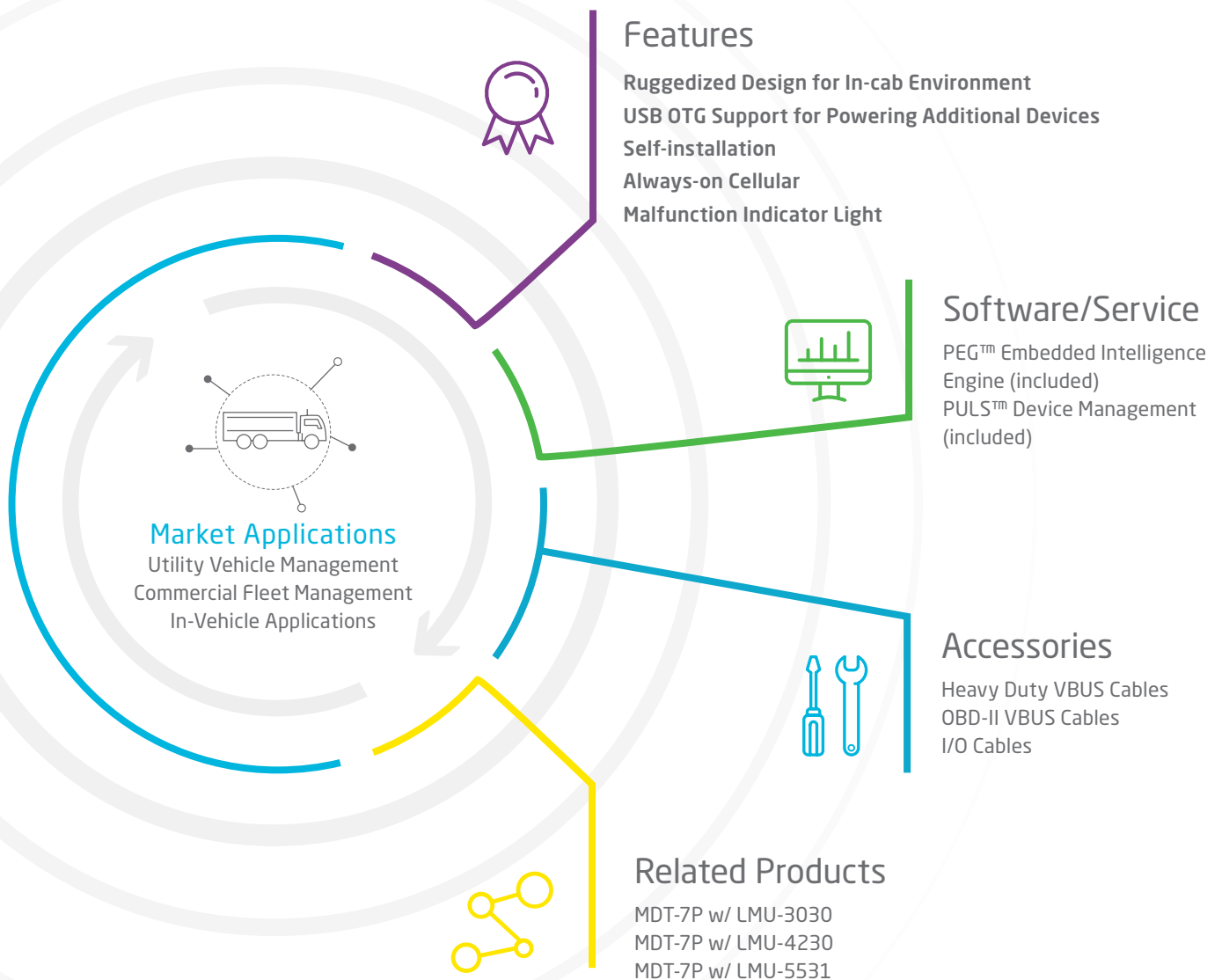# V-Series™

A Turnkey In-Vehicle Telematics Solution Kit

The V-Series™ is a three-part kit that includes a removable Android MDT-7P™ tablet, VDK-3641 embedded telematics capable device and cable connectors. A convenient and reliable software-agnostic solution enhanced with LTE Cat 1 to meet in-vehicle telematics needs.

Features

Ruggedized Design for In-cab Environment
USB OTG Support for Powering Additional Devices
Self-installation
Always-on Cellular
Malfunction Indicator Light

Software/Service

PEG™ Embedded Intelligence Engine (included)
PULS™ Device Management (included)

Market Applications

Utility Vehicle Management
Commercial Fleet Management
In-Vehicle Applications

Accessories

Heavy Duty VBUS Cables
OBD-II VBUS Cables
I/O Cables

Related Products

MDT-7P w/ LMU-3030
MDT-7P w/ LMU-4230
MDT-7P w/ LMU-5531

V-Series™ Technical Specifications

Cellular/Network

North American Variant I	
LTE Cat 1	1900 (B2)/AWS (B4)/850 (B5)/700 (B12) MHz
HSPA/UMTS	850 (V)/1900 (II) MHz

North American Variant II	
LTE Cat 1	AWS 1700 (B4)/700 (B13) MHz

Data Support

SMS, TCP, UDP, CalAmp Telematics Cloud API

Satellite Location (GNSS)

Constellation Support	Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS, GAGAN)
Channels	50+ Channel
Acquisition Sensitivity	-162 dBm
Location Accuracy	~2.0m CEP Open Sky (GPS SBAS 24 hours static)
AGPS Capable	-148 dBm
Geo-Fence	32 radial and 32 polygonal geo-fences on-board device
Location Update Rate	1 Hz

Certifications

Industry Certifications	FCC, IC, PTCRB, RoHS

MDT-7P™ Android Tablet Features

Display	7" 1024 x 600 TFT LCD
Aspect Ratio	16:9
Operating System	Android™ 5.0 (Lollipop)
Processor	1GB DDR3 Internal RAM
Memory and Storage	8GB Internal ROM Expandable Micro SD Card Slot (up to 32GB)
Speaker	-40dBV sensitivity
Microphone	120Hz-10kHz, 80Hz-10kHz
Cameras	2m pixel with 6 IR LEDs (Front) 5m pixel (Back)

For full MDT-7P™ specifications visit: www.calamp.com/products/fleet-tracking-units/mdt-7p

Device Management

PULS™	Monitor, manage, upgrade firmware, configure and troubleshoot devices remotely

Embedded Intelligence Engine

PEG™	Update device functionality or develop new on the edge applications

Electrical

Operating Voltage	9-30 VDC (start-up, operating) 8-32 VDC (momentary)
Power Consumption	Typical 0.5mA @ 12 V (deep sleep) Typical 100mA @ 12V (idle on network with VBUS active)

Battery Pack

Battery Capacity	Up to 200 mAh
Battery Technology	Lithium-Ion

Environmental

Temperature	-30° to +75° C (connected to primary power)
Humidity	95% RH @ 50° C non-condensing
Shock and Vibration	U.S. Military Standards 202G, SAEJ1455
ESD	SAEJ1113-13 (4KV Limit)

Physical/Design

Dimensions	6.1 x 8.2 x 1.6" (156 x 209 x 41 mm)
Weight	6.28 oz. (178 g)

Connectors/SIM Access

External Cellular Antenna	6-Pin Connector
I/O Connection	16-Pin Connector
SIM Access	External
Vehicle Bus Option	

Interface Standards

Heavy Duty Truck Data	J1939, J1708
Light Duty Vehicle Data	J1850 PWM, J1850 VPW ISO 9141-2, KWP 2000, ISO 15765 CAN

Product Options

6-Pin connector (for power + debug)
16-Pin extension cable (2m length)
Screw mounting bracket
Customized hardware and software development