

LMU-3640™ Technical Specifications

Cellular/Network

| | |
|---|---|
| North American Variant I LTE Cat 1 HSPA/UMTS | 1900 (B2)/AWS 1700 (B4)/850 (B5)/700 (B12) MHz 850 (V)/1900 (II) MHz |
| North American Variant II LTE Cat 1 | AWS 1700 (B4)/700 (B13) MHz |
| Global Variant HSPA/UMTS GSM/GPRS | 800 (VI)/850 (V)/900 (VIII)/1800 (III)/1900 (II) MHz 850/900/1800/1900 MHz |

Data Support

SMS, UDP Packet Data, TCP, CalAmp Telematics Cloud API

Satellite Location (GNSS)

| | |
|----------------------------------|--|
| Constellation Support | Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS) |
| Channels | 55 Channel |
| Tracking Sensitivity | -162 dBm |
| Acquisition Sensitivity | -156 dBm (hot start) -148 dBm (cold start) |
| Location Accuracy | ~2.0m CEP Open Sky (SBAS 24 hours static) |
| Location Update Rate | Up to 4 Hz |
| AGPS Location assistance capable | |

Comprehensive I/O

| | |
|----------------------------|---|
| Ignition Input | 1 (fixed bias) |
| Digital Inputs | 4 (high/low bias selectable 0-30 VDC) |
| Digital Outputs | 3 (open collector relay 150mA) |
| Analog Inputs | 2 external ADC inputs |
| Accelerometer | Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection) |
| 1-Wire® Interface | 1 (driver ID/temperature sense) |
| Power Output | 1 switched VIN |
| Status LEDs | 4 (GPS, cellular, VBUS, LAN) |
| Serial Interface | 2 TTL ports |
| Integrated Buzzer | Programmable audible alert |
| External ADC Inputs | 2 (reference voltage - 3.3V) |

Certifications

Industry Certifications FCC, IC, PTCRB, RoHS

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 | 12/24 VDC Vehicle Systems 9-30 VDC (start-up, operating) 7-32 VDC (momentary) |
| Power Consumption | Typical 450uA @ 12V (deep sleep) Typical 15mA @ 12V (radio-active sleep) Typical 100mA @ 12V (active tracking w/GPS and cell enabled) |

Battery Pack

| | |
|-----------------------------|----------------|
| Battery Capacity | Up to 1000 mAh |
| Battery Technology | Lithium-Ion |
| Charging Temperature | 0° to +45° C |

Environmental

| | |
|----------------------------|---|
| Temperature | -30° to +60° C (connected to primary power) -10° to +60° C (operating on internal battery) -20° to +25° C ≤ 6 months (long term storage with battery) |
| Humidity | 95% RH @ 50° C non-condensing |
| Shock and Vibration | U.S. Military Standards 202G, SAEJ1455 |
| ESD | SAE J1113-13 (4 KV Limit) |

Physical/Design

| | |
|-------------------|-------------------------------------|
| Dimensions | 5.7 x 2.1 x 1.3" (145 x 53 x 33 mm) |
| Weight | 5 oz. (142 g) (w/ 1000mAh battery) |

Connectors/SIM Access

| | |
|------------------------|--------------------|
| Vehicle BUS I/F | 16-Pin 3mm Pitch |
| Power, I/O | 24-Pin 3mm Pitch |
| SIM Access | Internal (2FF SIM) |

Interface Standards

| | |
|--------------------------------|---|
| Bluetooth | Classic Bluetooth v2.1+EDR and BLE v4.0 |
| Heavy Duty Truck Data | J1939, J1708 |
| Light Duty Vehicle Data | J1850 PWM, J1850 VPW, SW-CAN ISO 9141-2, KWP 2000, ISO 15765 CAN |

Product Options

RS-232 on Aux 2
I/O wiring harness
200mAh Lithium-Ion backup battery
Wi-Fi 802.11 a/g/b/n client mode

CALIFORNIA PROPOSITION 65



WARNING:

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LMU-3030™ LTE Technical Specifications

Cellular/Network

North American Variant I
LTE Cat 1 1900 (B2)/AWS 1700 (B4)/700 (B12) MHz

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

Data Support

SMS, UDP Packet Data, TCP, CalAmp Telematics Cloud API

Satellite Location (GNSS)

Constellation Support GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS, GAGAN)

Channels 55 Channel

Tracking Sensitivity -167 dBm

Acquisition Sensitivity -157 dBm (hot start)
-148 dBm (cold start)

Location Accuracy ~2.0m CEP Open Sky (GPS SBAS 24 hours static)

Location Update Rate Up to 4 Hz

AGPS Location assistance capable

Comprehensive I/O

OBD-II Interface J1850 PWM, J1850 VPW, ISO-9141-2, ISO-14230 (KWP 2000), SW-CAN, ISO-15765 CAN

Serial Port 2-wire TTL Serial Interface

Bluetooth Bluetooth Low Energy (BLE)

Status LEDs 3 (OBD, GPS, cellular)

Integrated Buzzer Programmable audible alert

Accelerometer Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection)

Certifications

Industry Certifications FCC, IC, CE, PTCRB, RoHS

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

Geo-Fences 32 built-in

Buffered Messages 2000

Electrical

Operating Voltage 12/24 VDC Vehicle Systems
9-30 VDC (start-up, operating)
7-32 VDC (momentary)

Power Consumption Typical 2mA @ 12 V (deep sleep)
Typical 40mA @ 12 V (active tracking w/ GPS and cell enabled)

Battery Pack

Battery Capacity 180 mAh

Battery Technology Lithium-Ion

Charging Temperature 0° to +45° C

Environmental

Temperature -30° to +60° C (connected to primary power)
-20° to +60° C (operating on battery)
-20° to +25° C ≤ 6 months (long term storage with battery)

Humidity 95% RH @ 50° C non-condensing

Shock and Vibration U.S. Military Standards 202G, 810F; SAEJ1455

ESD IEC 61000-4-2 (4KV Test)

Physical/Design

Dimensions 1.8 x 2.6 x 1.1" (46 x 67 x 28 mm)

Weight 1.75 oz (50 g)

OBD Data Extraction

Detection Automatic detection of vehicle interface services

Extraction Transmission of standard OBD-II codes, plus manufacturer specific codes which are made available by the embedded OBD firmware stack

Scripts Download of vehicle specific diagnostic scripts dependent on vehicle model variant

Connectors/SIM Access

GPS Antenna Internal

Cellular Antenna Internal

SIM Access Internal (2FF SIM)

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TTU-2830™ Technical Specifications

Cellular/Network

| | |
|----------------------------------|--|
| North American Variant I | |
| LTE Cat 1 | 1900 (B2)/AWS 1700 (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 |
| Global Variant I | |
| HSPA/UMTS | 800 (VI)/850 (V)/900 (VIII)/1800 (III)/1900 (II) MHz |
| GSM/GPRS | 850/900/1800/1900 MHz |
| Global Variant II | |
| GSM/GPRS | 850/900/1800/1900 MHz |

Data Support

SMS, UDP Packet Data, TCP, CalAmp Telematics Cloud API

Satellite Location (GNSS)

| | |
|---|--|
| Constellation Support | Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS) |
| Channels | 55 Channel |
| Tracking Sensitivity | -167 dBm |
| Acquisition Sensitivity | -156 dBm (hot start) -148 dBm (cold start) |
| Location Accuracy | ~2.0m CEP Open Sky (SBAS 24 hours static) |
| Location Update Rate | Up to 4 Hz |
| Anti-jamming | |
| AGPS Location assistance capable | |

Comprehensive I/O

| | |
|--------------------------|---|
| Ignition Inputs | 1 fixed bias |
| Digital Inputs | 2 (high/low bias selectable 0-30 VDC) |
| Digital Outputs | 3 (open collector relay 150mA) |
| Analog Inputs | 1 external ADC input |
| Accelerometer | Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection) |
| Serial Interface | 1 TTL port |
| 1-Wire® Interface | 1 (driver ID/temperature sense) |
| Status LEDs | 2 (GPS and cellular) |

Certifications

Industry Certifications FCC, IC, PTCRB, RoHS

Electrical

| | |
|--------------------------|--|
| Operating Voltage | 12/24 VDC Vehicle Systems 9-30 VDC (start-up, operating) 7-32 VDC (momentary) |
| Power Consumption | Typical 400uA @ 12V (deep sleep) Typical 15mA @ 12V (radio-active sleep) Typical 60mA @ 12V (active tracking w/GPS and cell enabled) |

Battery Pack

| | |
|-----------------------------|----------------|
| Battery Capacity | Up to 5200 mAh |
| Battery Technology | Lithium-Ion |
| Charging Temperature | 0° to +45° C |

Environmental

| | |
|----------------------------------|--|
| Temperature | -30° to +60° C (connected to primary power) -20° to +60° C (operating on internal battery) -20° to +25° C (storage > 3 months) |
| Humidity | 95% RH @ 50° C non-condensing |
| Shock and Vibration | U.S. Military Standards 202G, SAEJ1455 |
| ESD | SAE J1113-13 (4 KV Limit) |
| Ingress Protection Rating | IP66 |

Physical/Design

| | |
|-------------------|------------------------------------|
| Dimensions | 4.5 x 3.2 x 1.6" (114 x 80 x 39mm) |
| Weight | 8.11 oz. (230g) |

Connectors/SIM Access

| | |
|-------------------|-------------------------|
| Power, I/O | 12 wire captive harness |
| SIM Access | Internal (2FF SIM) |

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 |
|-------------|---|

CALIFORNIA PROPOSITION 65



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LMU-5531™ Technical Specifications

Cellular/Network

| | |
|---------------------------------|--|
| North American Variant I | |
| LTE Cat 3 | 1900 (B2)/AWS 1700 (B4)/850 (B5)/700 (B12) MHz |
| HSPA/UMTS | 850 (V)/AWS 1700 (IV)/1900 (II) MHz |
| GSM/GPRS | 850/900/1800/1900 MHz |

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

| | |
|-----------------------|--|
| Global Variant | |
| HSPA/UMTS | 800 (VI)/850 (V)/900 (VIII)/1900 (II)/2100 (I) MHz |
| GSM/GPRS | 850/900/1800/1900 MHz |

Data Support

TCP/IP, UDP/IP, DHCP, HTTP, IP Router, PPP, HTTP web server, Telnet DHCP server, DDNS, DDNS Client, NAT, NMEA, TAIP, TSIP, TFTP, IP port forwarding, CalAmp Telematics Cloud API

Satellite Location (GNSS)

| | |
|------------------------------|--|
| Constellation Support | Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS) |
|------------------------------|--|

| | |
|-----------------|------------|
| Channels | 56 Channel |
|-----------------|------------|

| | |
|-----------------------------|----------|
| Tracking Sensitivity | -162 dBm |
|-----------------------------|----------|

| | |
|--------------------------------|---|
| Acquisition Sensitivity | -156 dBm (hot start) -148 dBm (cold start) |
|--------------------------------|---|

| | |
|--------------------------|---|
| Location Accuracy | ~2.0m CEP Open Sky (GPS SBAS 24 hours static) |
|--------------------------|---|

| | |
|-----------------------------|------------|
| Location Update Rate | Up to 4 Hz |
|-----------------------------|------------|

AGPS Location assistance capable

Comprehensive I/O

| | |
|-----------------------|----------------------------------|
| Digital Inputs | 7 (high/low selectable 0-30 VDC) |
|-----------------------|----------------------------------|

| | |
|------------------------|--|
| Digital Outputs | 5 relay driver outputs (200mA) 2 low current LED outputs (20mA) |
|------------------------|--|

| | |
|----------------------|----------------------------------|
| Analog Inputs | 5 general purpose A/D (0-30 VDC) |
|----------------------|----------------------------------|

| | |
|----------------------|---|
| Accelerometer | Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection) |
|----------------------|---|

| | |
|--------------------------|----------------------------------|
| 1-Wire® Interface | 2 (driver ID, temperature sense) |
|--------------------------|----------------------------------|

| | |
|--------------------|-------------------------------|
| Status LEDs | 4 (Pwr, COMM, GPS, Wi-Fi, BT) |
|--------------------|-------------------------------|

| | |
|-------------------------|--|
| Serial Interface | 1 DB-9 (RS232/RS485), 1 5-Pin TTL level switch power |
|-------------------------|--|

Certifications

| | |
|--------------------------------|--------------------------|
| Industry Certifications | FCC, CE, IC, PTCRB, RoHS |
|--------------------------------|--------------------------|

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 |
|-------------|---|

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Electrical

| | |
|--------------------------|---|
| Operating Voltage | 12/24 VDC Vehicle Systems 9-30 VDC (start-up, operating) 8-32 VDC (momentary) |
|--------------------------|---|

| | |
|--------------------------|---|
| Power Consumption | <2mA @ 12V (deep sleep) 160mA @ 12V (idle on network) 270mA @ 12V (active tracking) |
|--------------------------|---|

Battery Pack

| | |
|-------------------------|----------------|
| Battery Capacity | Up to 1000 mAh |
|-------------------------|----------------|

| | |
|---------------------------|-------------|
| Battery Technology | Lithium-Ion |
|---------------------------|-------------|

| | |
|-----------------------------|--------------|
| Charging Temperature | 0° to +45° C |
|-----------------------------|--------------|

Environmental

| | |
|--------------------|---|
| Temperature | -30° to +70° C (connected to primary power) -40° to +85° C (storage) |
|--------------------|---|

| | |
|-----------------|-------------------------------|
| Humidity | 95% RH @ 50° C non-condensing |
|-----------------|-------------------------------|

| | |
|----------------------------|---|
| Shock and Vibration | U.S. Military Standards 202G, 810F, SAE J1455 |
|----------------------------|---|

| | |
|------------|------------------------|
| ESD | SAE J1113 (4 KV Limit) |
|------------|------------------------|

Physical/Design

| | |
|-------------------|--------------------------------------|
| Dimensions | 5.8 x 4.0 x 1.2" (146 x 102 x 40 mm) |
|-------------------|--------------------------------------|

| | |
|---------------|----------------|
| Weight | 8.0 oz. (227g) |
|---------------|----------------|

Connectors/SIM Access

| | |
|-----------------------------|-----------------|
| Power, Ignition, ADC | 4-Pin Connector |
|-----------------------------|-----------------|

| | |
|------------|------------------|
| I/O | 22-Pin Connector |
|------------|------------------|

| | |
|--------------------|----------|
| GPS Antenna | External |
|--------------------|----------|

| | |
|-------------------|----------|
| SIM Access | External |
|-------------------|----------|

| | |
|-----------------|-----------------------|
| Ethernet | 2x 10/100 Base-T RJ45 |
|-----------------|-----------------------|

| | |
|------------|-------------------------------|
| USB | On-the-go (mini), Host Type A |
|------------|-------------------------------|

Interface Standards

| | |
|------------------|----------------------------|
| Bluetooth | 4.0 Dual-Mode Classic, BLE |
|------------------|----------------------------|

| | |
|--------------|--|
| Wi-Fi | 802.11 b/g/n Supports access point and/or client operations Supports internal/external antenna |
|--------------|--|

Product Options

All necessary antennas (GPS, cellular, combined GPS/cellular)

Serial adapter cable RS-232 8-wire (PPP, AT commands, NMEA GPS output)

Internal/External/Optional jPOD™ truck ECU interface

Connectorized I/O wiring harnesses

TTU-730™ Technical Specifications

Cellular/Network

North American Variant I

| | |
|-----------|--|
| LTE Cat 1 | 1900 (B2)/AWS 1700 (B4)/850 (B5)/700 (B17) MHz |
| HSPA/UMTS | 850 (V)/1900 (II) MHz |

North American Variant II

| | |
|-----------|-----------------------------|
| LTE Cat 1 | AWS 1700 (B4)/700 (B13) MHz |
|-----------|-----------------------------|

Data Support

SMS, UDP Packet Data

Satellite Location (GNSS)

Constellation Support GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS, GAGAN)

Channels 55 Channel

Tracking Sensitivity -167 dBm

Acquisition Sensitivity -157 dBm (hot start)
-148 dBm (cold start)

Location Accuracy ~2.0m CEP Open Sky (SBAS 24 hours static)

Location Update Rate 1 Hz

AGPS Location assistance capable

Certifications

Industry Certifications FCC, IC, PTCRB, RoHS

Device Management

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

Embedded Intelligence Engine

PEG™ Behavioral scripting (8-bit support)

Accelerometer Built-in, triple-axis (motion sensing, tilt detection)

Geo-fences 10 built-in

Buffered Messages 2000

Electrical

Operating Voltage 3.6V internal battery

Power Consumption Typical 30uA @ 3.6V (hibernate)
Typical 50uA @ 3.6V (deep sleep)
Typical 50mA @ 3.6V (active GPS tracking only)
Typical 80mA @ 3.6V (cellular idle only)

Battery Pack

Battery Capacity Up to 57 Ah

Battery Voltage 3.6V

Battery Technology Lithium Primary

Environmental

Temperature -30° to +65° C (operating and storage)

Humidity 95% RH @ 50° C non-condensing

Shock and Vibration U.S. Military Standards 202G, 810F, SAE J1455

ESD IEC 61000-4-2 (4KV test)

Ingress Protection Rating IP67

Physical/Design

Dimensions 9.90 x 2.35 x 2.45" (251 x 60 x 62 mm)

Weight 23.2 oz. (658 g)

Connectors/SIM Access

GPS Antenna Internal

Cellular Antenna Internal

SIM Access Internal (2FF SIM)

Product Options

CalAmp Telematics Cloud API

CALIFORNIA PROPOSITION 65



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TTU-2840XTreme™ Technical Specifications

Cellular/Network

| | |
|----------------------------------|--|
| North American Variant I | |
| LTE Cat 1 | 1900 (B2)/AWS 1700 (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, UDP Packet Data, TCP, CalAmp Telematics Cloud API

Satellite Location (GNSS)

| | |
|---|--|
| Constellation Support | Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS) |
| Channels | 55 Channel |
| Tracking Sensitivity | -167 dBm |
| Acquisition Sensitivity | -156 dBm (hot start) -148 dBm (cold start) |
| Location Accuracy | ~2.0m CEP Open Sky (SBAS 24 hours static) |
| Location Update Rate | Up to 4 Hz |
| Anti-jamming | |
| AGPS Location assistance capable | |

Comprehensive I/O

| | |
|--------------------------|---|
| Ignition Inputs | 1 fixed bias |
| Digital Inputs | 2 (high/low bias selectable 0-30 VDC) |
| Digital Outputs | 3 (open collector relay 150mA) |
| Analog Inputs | 1 external ADC input |
| Accelerometer | Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection) |
| Serial Interface | 1 TTL port |
| 1-Wire® Interface | 1 (driver ID/temperature sense) |
| Status LEDs | 2 (GPS and cellular) |

Certifications

Industry Certifications FCC, IC, PTCRB, RoHS

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 | 12/24 VDC Vehicle Systems 9-32 VDC (start-up, operating) 7-32 VDC (momentary) |
| Power Consumption | Typical 400uA @ 12V (deep sleep) Typical 15mA @ 12V (radio-active sleep) Typical 60mA @ 12V (active tracking w/GPS and cell enabled) |

Battery Pack

| | |
|-----------------------------|---|
| Battery Capacity | Up to 5300 mAh |
| Battery Technology | Lithium-Ion |
| Charging Temperature | -15° to +55° C (extended temperature range) |

Environmental

| | |
|----------------------------------|--|
| Temperature | -30° to +60° C (connected to primary power) -20° to +60° C (operating on internal battery) -20° to +35° C (storage > 3 months) |
| Humidity | 95% RH @ 50° C non-condensing |
| Shock and Vibration | U.S. Military Standards 202G, SAEJ1455 |
| ESD | SAE J1113-13 (4 KV Limit) |
| Ingress Protection Rating | IP67 |

Physical/Design

| | |
|-------------------|------------------------------------|
| Dimensions | 5.4 x 3.1 x 2.0" (137 x 80 x 52mm) |
| Weight | 12.06 oz. (342g) |

Connectors/SIM Access

| | |
|-------------------|---|
| Power, I/O | 12 wire connector with detachable harness |
| SIM Access | Internal (2FF SIM) |

CALIFORNIA PROPOSITION 65



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Cal/Amp®

Custom Garmin Driver Interface

- Garmin FMI Integrated
- Touchscreen
- Customized Canned Two-Way Messaging
- Driver Login
- Turn by Turn Navigation



General

| | |
|--------------------------|--|
| Physical dimensions | 5.5"W x 3.3"H x .7"D (14.0 x 8.4 x 1.8 cm) |
| Display size | 4.4"W x 2.5"H (11.1 x 6.3 cm); 5.0" diag (12.7 cm) |
| Display resolution | 480 x 272 pixels |
| Display type | WQVGA color TFT with white backlight, glass capacitive touch |
| Dual-orientation display | ✓ |
| Weight | 6.1 oz (173.7 g) |
| Battery | rechargeable lithium-ion |
| Battery life | up to 1 hour |

Maps & Memory

| | |
|-----------------------|------------------------------|
| Preloaded street maps | ✓ |
| Includes map updates | ✓ |
| Data cards | microSD™ card (not included) |

Camera Features

| | |
|--------------------------|------------------------|
| Backup camera compatible | yes (BC™ 30 or BC™ 40) |
|--------------------------|------------------------|

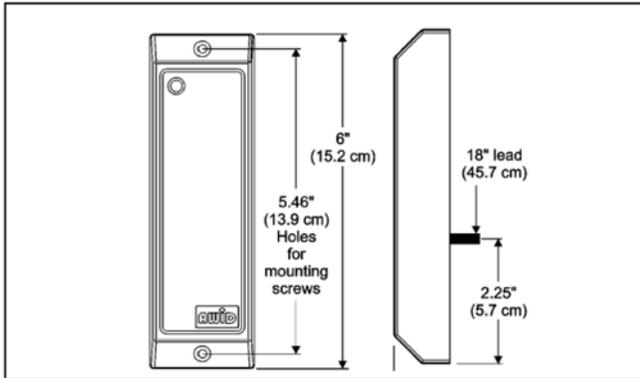
Navigation Features

| | |
|--|---|
| Garmin Real Directions™ landmark guidance | ✓ |
| Millions of Foursquare® points of interest | ✓ |
| TripAdvisor® ratings for points of interest | ✓ |
| Route shaping through preferred cities/streets | ✓ |
| Voice-activated navigation (operate device with spoken commands) | ✓ |
| Includes traffic | ✓ |
| Lane assist with junction view (displays junction signs) | ✓ |
| Bluetooth® calling | ✓ |
| Speed limit indicator (displays speed limit for most major roads in the U.S. and Europe) | ✓ |
| Driver alerts for sharp curves, school zones, red light and speed camera warnings and more | ✓ |

Specifications and model subject to change.



Driver ID – Dash-Mounted RFID Reader



FEATURES

Compact size...

Fits on a mullion or door frame

Clean, slim design...

Matches good architecture at site

Ready for rough usage...

Rugged, strong construction

Ready for adverse weather...

One-part enclosure with potting

Easy mounting...

2 screws (supplied) for fastening

Special read range in a small unit...

Up to 8 inches with cards

Visual and audible indicators...

3-color LED and beeper inside reader

Controllable functions in reader...

LED, beeper, hold can be wired to panel

Specifications subject to change.

OPERATING CHARACTERISTICS

Reading Distance:

With cards – Up to 8 inches (varies with mounting method, voltage applied to reader, and credential type)

Excitation Frequency:

Transmit and Receive - 125 kHz

Antenna Output:

Omni-directional low-frequency RF field

Indicators (Control by Reader and Panel):

LED – 3 colors, red-amber-green
Beeper – piezo-electric, 4 kHz tone

Power Supply:

+5 volts to +12 volts DC, linear, regulated
Current rating: 120 mA at 5 V, 200 mA at 12 V

Communication Protocols:

Wiegand electrical interface
RS-232 serial interface

Code Formats:

Determined by AWID's credentials programmed with 26 bits to 50 bits

Cable (for Wiegand Interface):

4 to 7 conductors (not twisted pairs), stranded, 22 gauge, color-coded, overall 100% shielded, plastic jacket; up to 500 ft

PHYSICAL CHARACTERISTICS

Dimensions:

6.0 x 1.75 x 1.0 inches (15.24 x 4.45 x 2.54 cm)

Weight:

6 ounces (170 g)

Material:

ABS 1-part enclosure, dark gray color
Epoxy resin potting at rear surface

Cable (Integrated with Reader):

10 conductors, 22 gauge, 18 inches long.
Overall shielded, gray plastic jacket

Mounting:

Door frame, window mullion, wall, cabinet

ENVIRONMENT

Operating Temperature:

-31°F to 150°F (-35°C to 65°C)

Operating Humidity:

0% to 95% non-condensing

Protection from Environment:

Use Lexan housing when reader must be removed from view or protected from damage.

Avoiding Interference:

Optimize reader performance by spacing or shielding reader from neighboring readers, including reader on other side of wall at door.

CERTIFICATION

ISO-9001:2000; FCC Part 15; IC; UL listed