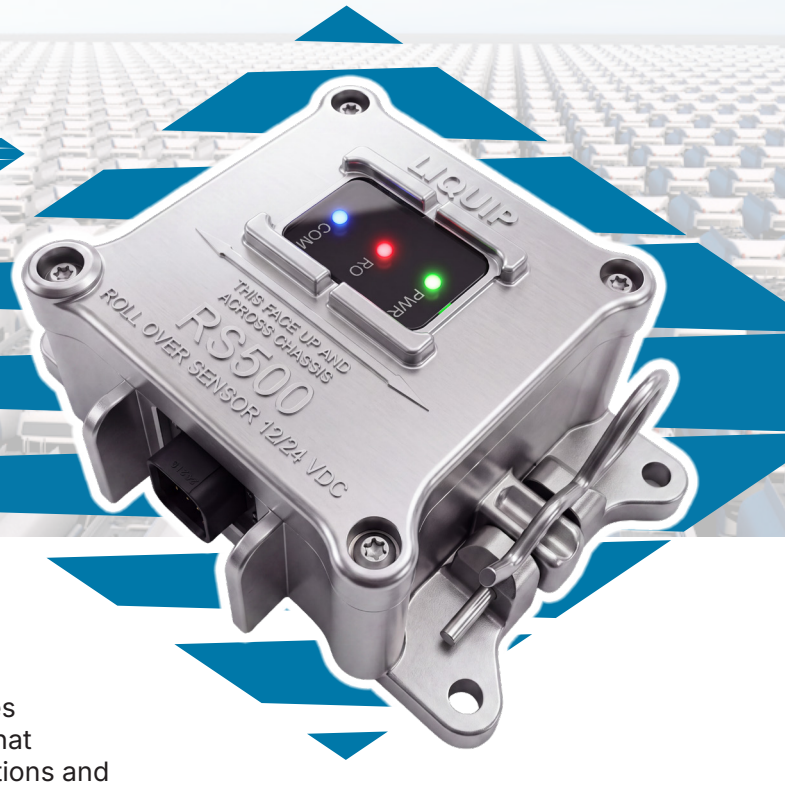
LIQUIP

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RS500

ROLLOVER SENSOR

The Liquip RS500 is a next-generation rollover sensor engineered for dangerous goods transport and heavy vehicles, ensuring strict compliance with AS2809:1 (2023) safety standards. Manufactured in Australia, the sensor features a dual-processor and dual-accelerometer architecture that continuously cross-verifies data while filtering out vibrations and road bumps to prevent accidental shutdowns.

In the event of a true rollover, the system instantly signals the battery isolation switch to cut electrical power, minimising ignition risks. Designed for streamlined deployment and smart fleet integration, the RS500 utilises a single-plug connection for fast installation and pairs with the Liquip LEADR App on iOS and Android for digital commissioning, testing, and auditing. Status and diagnostics are visible via an on-unit fault detection LED and an optional dash-mounted indicator lamp. Built to withstand extreme industrial environments, the rugged device is rated up to +85°C and housed in a fully sealed IP69K enclosure that resists high-pressure, high-temperature washdowns.

KEY FEATURES

- Meets AS2809 - Vehicle Rollover Device and utilises dual processors and dual accelerometers for maximum reliability and accuracy.
- The device will not be activated at less than 45° to the vertical.
- Automotive-grade design with single fault tolerant relay controls, continuous cross-verification, and self-diagnostics.
- Suitable for 12V or 24V systems.
- Built for the worlds harshest climates, engineered to withstand extreme temperatures of +85°C and above.
- IP69K rating and a fully sealed design offers the highest level of ingress protection.
- Single plug connection offers quick and seamless installation.
- Quick and easy in-situ testing using Liquip's proven integrated hinge design.
- Resistant to power surges.
- On-unit fault detection LED, with optional dash-mounted indicator lamp.
- New Liquip LEADR app offers commissioning, testing, reporting.
- Can also be used to operate a Liquip engine strangler to ensure the vehicle engine stops.
- Made in Australia.

MATERIALS OF CONSTRUCTION

Base, Body, Lid	Cast Aluminium
Humpback Pins / R-Clip	Zinc Plated Steel
Electronic Components	Encased in epoxy
Lens	Acrylic

TECHNICAL INFORMATION

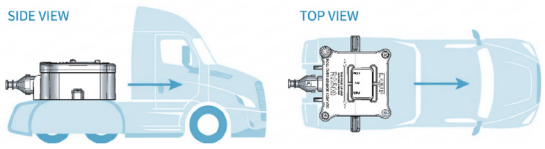
Operating Voltage	9V to 32V DC (Polarity Protected)	**LEDS**	PWR/RO/COM (with adjustable brightness)
Current Draw (Vin)	35mA (typical)	**Initial Startup Time**	7s
Ambient Temperature	-40°C to +85°C	**Mobile App Support**	Android™ and iOS®
Ambient Humidity	0% to 100%	**Firmware Upgrades**	Supported (Over-The-Air / OTA)
Rollover Angle	50° ± 2° (within temperature range)	**Telemetry Logs**	Captured every 10 s (up to 272 hours of data)
Rollover Time	2.7s ± 0.1s	**Wireless Connection**	Bluetooth 5.4
NOHP relay	25A (sink) @ 32V (Internally Fused)	**Weight**	0.7Kg
NOLP, COM	150mA @ 32V (Internally Fused)	**Dimensions**	165 × 131 × 66 mm (unit only)
NCLP, COM	150mA @ 32V (Internally Fused)	**Approvals**	ACMA RCM - Supplier No: E22275 Bluetooth® SIG - Design No: Q395879

STANDARD COMPLIANCE

Dangerous Goods Application	**AS 2809.1:2023**	Road tank vehicles for dangerous goods – Flammable liquids.
Automotive Component Qualification	**AEC-Q100** **AEC-Q101** **AEC-Q200**	Automotive grade qualification for active, discrete, and passive components.
EMC and Electrical Transient Immunity	**UN ECE Reg 10**	RF Radiated Emissions.
	ISO 7637-2:2011	Automotive Transient Immunity.
	ISO 16750-2:2012	Automotive Overvoltage, Centralized Load Dump (Test B), Starting Profile.
Ingress Protection	**IEC 60529** **ISO 20653:2023**	IP69K. Dust-tight and High-pressure / high-temperature washdown.

MOUNTING

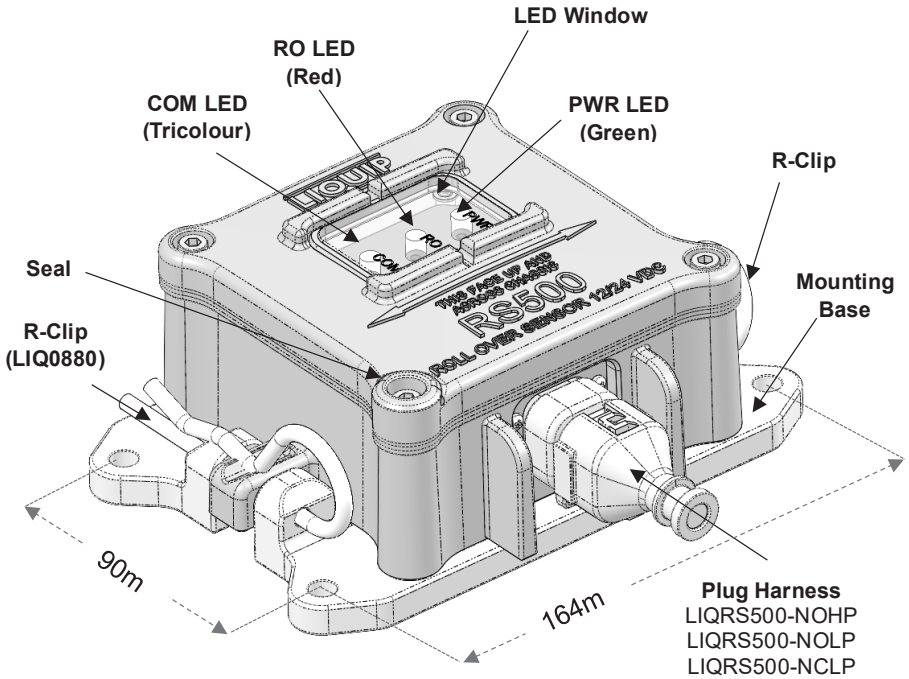
Mounting Hole Pattern (Pitch):	90 mm × 164 mm (rectangular pattern)	**Mounting Holes**	4 × Ø 8.5 mm (suitable for M8 or 5/16" fasteners)
	Mounting Instructions	Please refer to manual for full mounting instructions.	

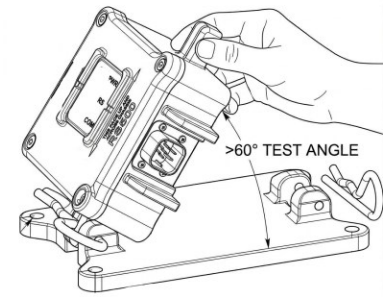


COMPATIBLE BATTERY ISOLATION SWITCHES

BRAND	SERIES	MODELS	COMPATIBLE HARNESS	ORDER MODEL
Baxters	T-Switch	TSW12V / TSW24V / TSW12VPP /	LIQRS500-NOHP	**RS500**
	DPS	DPS1200 / DPS2400		
Big Red	12V/24V	ACX3440 / ACX3441 / ACX3441CLEAD / BMS-12BMS-K-12L / BMS-24L / 196SA		
OEX	B-Safe	ACX3493HD / ACX3492HD		
ETA	12V	BMS01		
Oceania	Dual 12V	BMS-K-12L / LV5010K		
Redarc	12/24V	BMIS-4PNV2 / BMIS-4PPV2		
GSL	BMS	BMS-12K-L / BMS-24K-L		
Scania	12V/24V	Viatemis 0712801		
Menbers	12V	BMS106 / BMS107		
	24V	BMS100 / BMS104	LIQRS500-NCLP	**RS502**
Kissling	87	87-3-100	LIQRS500-NOLP	**RS501**

COMPONENTS DIAGRAM





ORDERING INFORMATION

RS500	Rollover Sensor 12/24v - c/w High Power Harness
RS501	Rollover Sensor 12/24v - c/w Low Power Harness

ASSOCIATED EQUIPMENT

LIQRS500-NOHP	Harness for Normally Open High-Power Control of BIS (RS500)
LIQRS500-NOLP	Harness for Normally Open Low-Power Control of BIS (RS501)
LIQRS500-NCLP	Harness for Normally Closed Low-Power Control of BIS (RS502)
LIQRS500-CONZ	Discrete parts for a custom harness assembly; includes plug, crimps, seal inserts, and back shell.
RS500-NC	RS500 unit without harness plug
LIQ-0880	Humpback Pins / R-Clip
RS500-1	Mounting Base

LEADR APP

LEADR stands for Liquip's Electronics Analyse & Diagnostic Reporting App. It allows operators and service technicians to register devices, monitor operating health, and manage maintenance directly from a smartphone or web browser.

Through LEADR, users can perform assisted on-site cycle tests, download digital compliance reports, and receive push notifications for service dues, warranty updates, and new firmware releases. Access the management portal at: leadr.liquip.com

The web portal features an integrated Log Analyser that decodes and visualizes uploaded device logs, event histories, and operational telemetry. This enables fleet maintenance teams to quickly investigate fault codes and diagnose issues remotely. Once a device is registered, all log data remains the exclusive property of the owner. Owners can share diagnostic records with service companies.

DISMANTLE

Not User Serviceable. Any unauthorised modification, repair, or tampering with the internal components will immediately void the manufacturer's warranty.