



Tilt Position Sensor

in Lift & Access Application - Aerial Work Platforms

Lift and Access Applications

- Aerial Work Platforms

Reliability and safety are critical considerations for an aerial work platform user. Stringent safety standards, precision control in dynamic scenarios, and the need to function reliably in extreme environments, demand best in class measurement equipment.

The VTS series of tilt sensors from Curtiss-Wright uses the latest advances in inertial measurement unit (IMU) technology to reliably measure tilt angle for improved safety.

With the IMU's combination of three gyroscopes and three accelerometers, plus advanced filtering from Curtiss-Wright, the VTS series enables designers to maximise their machines working range.

Feature	Function	Benefit
Dual-redundant measurement	Safely measures pitch and roll	Meeting international safety standards
Vibration-tolerant signals	Avoids nuisance trips	Reducing downtime
Thermally compensated (<math><0.004^\circ\text{K}</math> thermal error), CANbus outputs	Reliably reports position in extreme environments	improving accuracy of operation

Product Solutions from Curtiss-Wright



Reliability

- Latest IMU technology
- Precise measurement
- Fast-acting software algorithms
- Rapid filtering

Boosts machine performance and runtime by minimising nuisance trips



Safety

- MTTFd >385 years
- Dual sensor architecture
- Designed for compatibility with safety-rated systems e.g. EN13849

Plays a major role in improving operator safety



VTS Series

Value to OEM Customers



Performance

- Vibration-tolerant for dynamic applications, reducing nuisance trips and enhancing productivity
- Thermally compensated, ensuring consistency and improving accuracy to maximise working range



Durability

- IP67/69K enclosure, ensuring operation in extreme environments and reducing total cost of ownership
- Solid-state 'fit and forget' technology, increasing time between services and enhancing product life cycle



Easy Integration

- 6-48Vdc operating range, compatible with 12 and 24Vdc systems for ease of integration
- Integrated, industry-standard interface, providing reliable, cost effective connection for ease of installation

Other Applications



Construction Equipment

- Improves vehicle stability monitoring, enhancing safety and reducing tip-over risk
- Improves implement monitoring, enhancing and aiding in the automation of functions such as return to dig



Agricultural Equipment

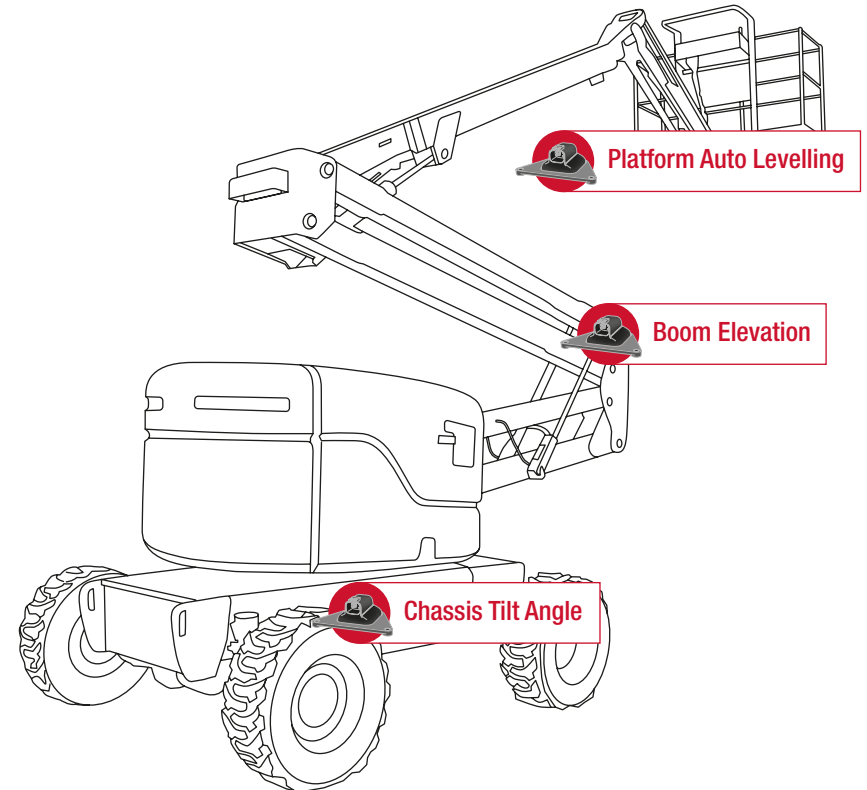
- Improves vehicle stability monitoring, enhancing safety and reducing tip-over risk
- Improves implement monitoring, enhancing and aiding in the automation of functions such as cutting height adjustment



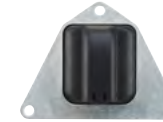
Material Handling Equipment

- Improves vehicle stability monitoring, enhancing safety and reducing tip-over risk
- Improves load monitoring, enhancing and aiding in the automation of functions such as load stabilisation and levelling

VTS Series Usage



3 Quarter View



Top View



Front & Back View



Side View

Other CW Products for Aerial Work Platforms



Joysticks
JC4000



Motor
Controllers
C3



Rotary
Sensors
NRH27x

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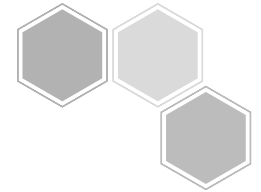
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