



# Tilt Position Sensor

in Lift & Access Application - Mobile Cranes

# Lift and Access Applications

## - Mobile Cranes

Reliability and safety are critical considerations for a mobile crane operator. Stable positioning, safe lifting, 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 lifting capability, productivity and safety.

Feature	Function	Benefit
Dual-redundant measurement	Safely measures pitch and roll	Improving safety of machine, site and operator
Vibration-tolerant signals	Provides stable, noise-free output	Increasing speed of deployment and operation
Thermally compensated (<math><0.004^\circ\text{/math>K thermal error), CANbus outputs	Reliably reports position in extreme environments	Maximising lifting range



## Product Solutions from Curtiss-Wright



### Reliability

- Latest IMU technology
- Precise measurement
- Fast-acting software algorithms
- Thermally compensated

**Boosts machine performance and uptime by enabling enhanced monitoring and control**



### Safety

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

**Plays a major role in improving safety**



**VTS Series**

## Value to OEM Customers



### Performance

- Vibration-tolerant for dynamic applications, reducing nuisance trips and enhancing productivity
- Thermally compensated, ensuring consistency and improved accuracy to optimise productivity



### Durability

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



### Easy Integration

- 6-48Vdc input range, compatible with 12 and 24Vdc systems for ease of integration
- Integrated, industry-standard connector and simple 3-bolt mounting for easy, reliable, and cost effective installation

## Other Applications



### Construction Equipment

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



### Agricultural Equipment

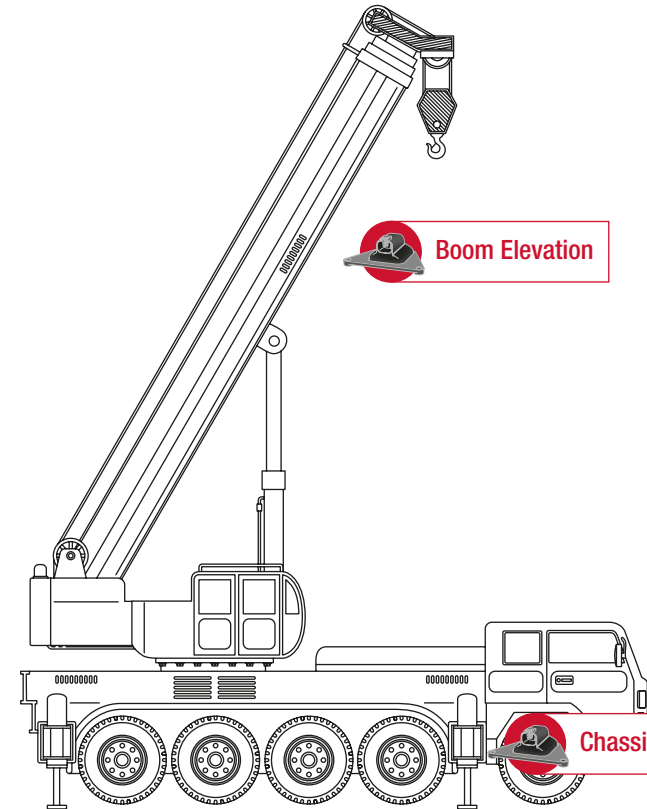
- Improves vehicle and attachment position monitoring, enhancing productivity and safety
- Aids in the automation of functions and attachments such as precise harvesting height and cutting angle



### 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 Mobile Cranes



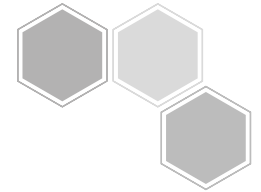
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JC6000



Power  
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Sensors  
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