



# 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**



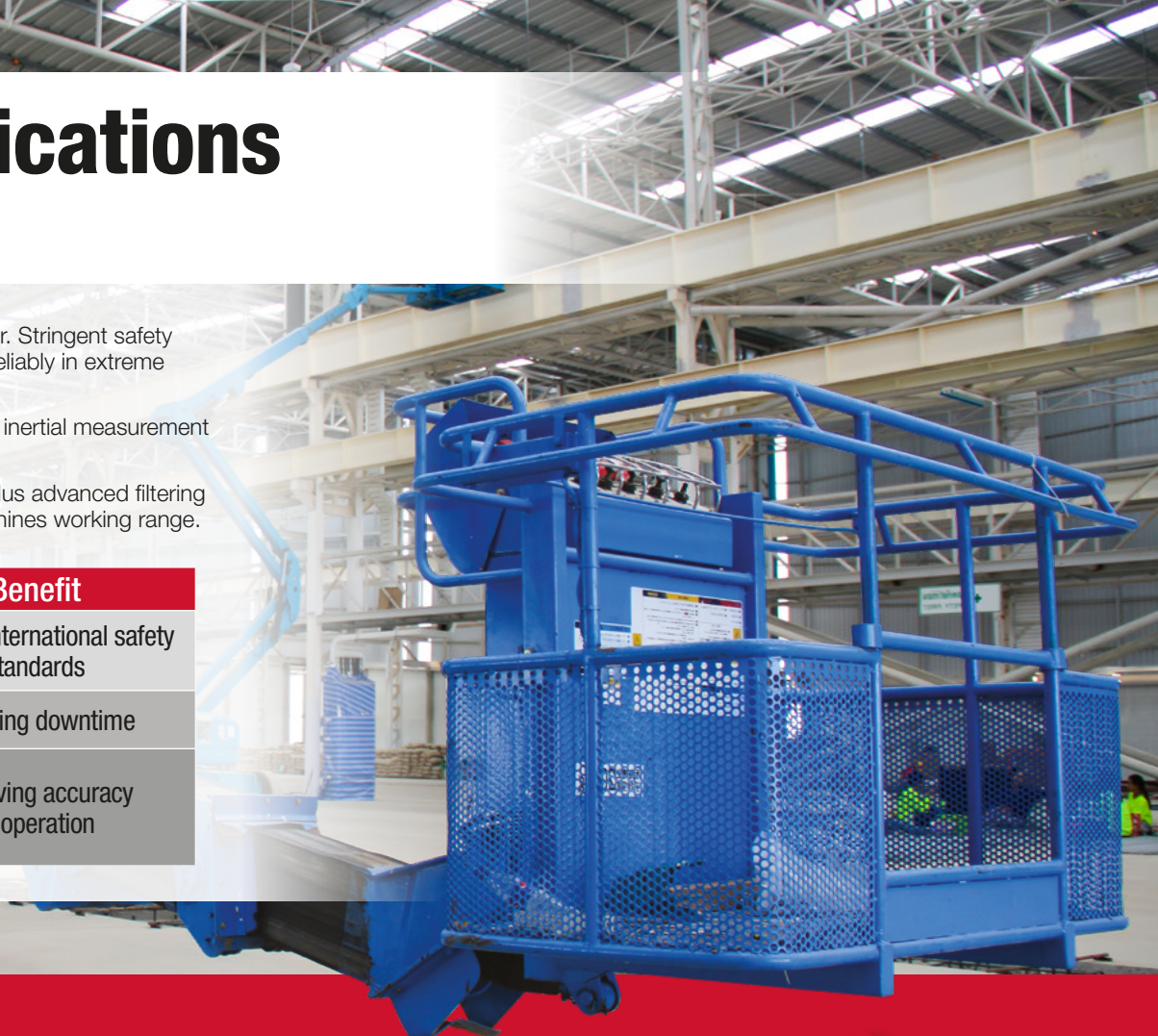
### Safety

- 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

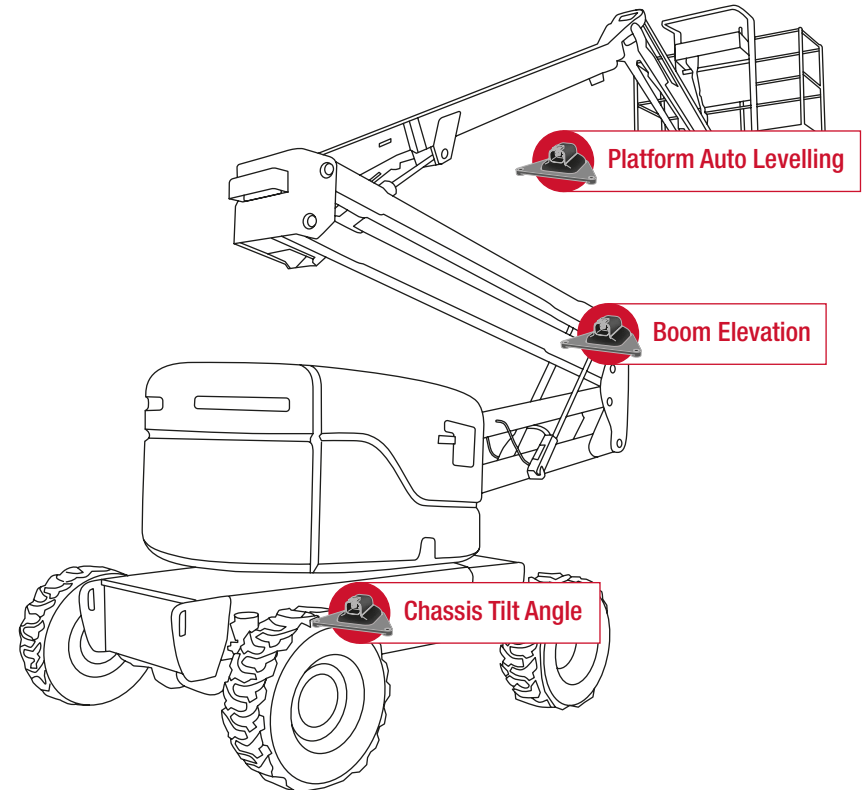
- Improves vehicle stability monitoring, enhancing safety and reducing tip-over risk
- Improves implement monitoring, enhancing and aiding in the automation of functions such as cutting height adjustment



### 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