



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

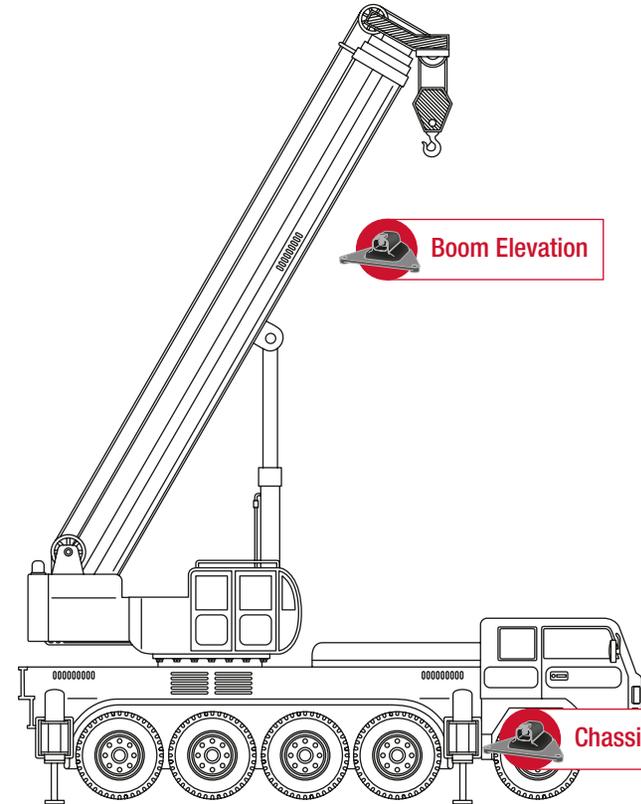
- Improves vehicle and attachment position monitoring, enhancing productivity and safety
- Aids in the automation of functions and attachments such as precise harvesting height and cutting angle



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



Joysticks
JC6000



Power
Electronics
WTI D260



Rotary
Sensors
WM-H10

Electronic Throttle Controls | Shifters | HMI Consoles

Contact Us

Asia

Shanghai, China

T: +86.21.3331.0670

E: cwig.cn@curtisswright.com

Taipei, Taiwan

T: +886.2.2778.1900

E: cwig.tw@curtisswright.com

Singapore

T: +65.6241.2508

E: cwig.sg@curtisswright.com

Pune, India

T: +91.20.67319100

E: cwig.in@curtisswright.com

Americas

LA, California

T: +1.714.982.1862

E: cwig.us@curtisswright.com

Chicago, Illinois

T: +1.847.844.4700

E: cwig.us@curtisswright.com

Portland, Oregon

T: +1.503.684.8600

E: cwig.us@curtisswright.com

São Carlos, Brazil

T: +55.16.2107.8745

E: cwig.br@curtisswright.com

Europe

Christchurch, UK

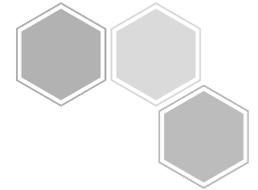
T: +44.1202.034000

E: cwig.uk@curtisswright.com

South Wales, UK

T: +44.1495.202000

E: cwig.uk@curtisswright.com



CURTISS - WRIGHT

Headquarters: 15, Enterprise Way, Aviation Park West, Bournemouth Airport, Christchurch, BH23 6HH, UK • www.cw-industrial.com

Facilities: Portland, Oregon, USA; Chicago, Illinois, USA; LA, California, USA; Christchurch, UK; South Wales, UK;

Pune, India; Singapore; Shanghai, China; Taipei, Taiwan.

Important Information: Whilst Curtiss-Wright has designed these sensors to meet a range of applications it is the responsibility of the customer to ensure it meets their specific requirement.

Curtiss-Wright makes no warranty or representation in respect of product fitness or suitability for any particular design application, environment, or otherwise, except as may subsequently be agreed in contract for the sale and purchase of products. Customers should therefore satisfy themselves of the actual performance requirements and subsequently the product's suitability for any particular design application and the environment in which the product is to be used.

Continual research and development may require change to products and specification without prior notification.

All trademarks acknowledged.

