

APPLICATIONS

Marine vessel control: Joystick maneuver, bow thruster

Industrial multi-axis control: off-highway, mobile equipment, agriculture, forklifts

FEATURES

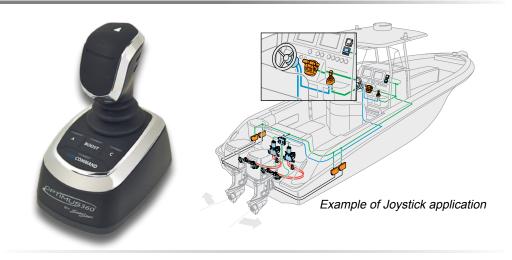
- Rugged electronic 3-axis joystick for 12VDC marine or industrial applications
- Dual redundant, non-contact hall effect sensors on each axis, six sensors total
- Dual CAN BUS outputs: High-speed CAN and fault tolerant CAN
- Dual redundant power supplies
- Designed for recreational and commercial boats and vehicles
- Ergonomic handle and base design for comfortable precision operation
- Guided feel for preferential primary axis control
- Flexible base lip seal
- Soft-touch elastomeric four-button keypad with blue LED's

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OPTIMUS 360 JOYSTICK



The Optimus 360 Joystick is a non-contact, 3-axis vessel control module providing intelligent position control. It features redundancy for dual sensing inputs for the most demanding joystick control applications. Specially designed for the marine industry.

SPECIFICATIONS

Electrical

- Operating voltage: 9-16 VDC [SAE J1455]
- · Dual CAN bus
- CAN bus 1: High Speed CAN 250 kbps [SAE J1939]
- CAN bus 2: Fault Tolerance CAN 125 kbps [ISO 11898-3]
- · Protected from reverse polarity, power interruption.
- · Power transient protection: Switching transient, starter motor disturbance, and load dump. [SAE J1113-11]
- · Conducted Immunity: 10 Vrms, Criteria A [IEC 60945]
- Radiated Immunity: 10 V/m, Criteria A [IEC 60945]
- Electrostatic discharge protection: 6kV contact, 8 kV air [IACS E10]
- Compass safe distance: 50 cm, at 1° deflection [IEC 60945]

Mechanical for X, Y axes

- Mechanical angle of movement: +/- (18° +/- 2°)
- Actuator force: 1.0 +/- 0.2 lbf
- Typical current drawn: Less than 300mA
- Square limiting plate
- Guided feel for primary X, Y directions
- Durability: Minimum 500,000 cycles

Mechanical for Z axis

 Mechanical angle of movement: +/- 40 degree

Connection

- 2 x 6-Pin male, FCI Apex-2.8 connectors
- Built in CAN network tee for multi-station connection
- Connector tensile pull resistance: 60 lbf [ISO 10133]

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OPTIMUS 360 JOYSTICK

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- Take command bicolor blue and red LED for on-board diagnostic
- Adjustable LED light intensity
- Backlight for dark environment
- Meets or exceeds ABYC, ISO, SAE electrical and environmental requirements
- CE certified

Environmental

- · Operating temperature:
- -18°C to +77°C [ISO 25197]
- Storage temperature: -40°C to +85°C [ISO 25197]
- · Corrosion resistance:
- 1000 hours salt spay [ASTM B117]
- Water ingress protection: IPX7 [IEC 60529]

Shock & Vibration

- Random vibration:
- 0.0284 g^2/Hz [ABYC P-27]
- Resonant vibration:
- 4 G zero-peak, 20-2000 Hz [ABYC P-27]
- Thermal shock: 100 cycles
- · Mechanical shock:
- 50 G, 11 msec half-sine shape [ISO 25197]

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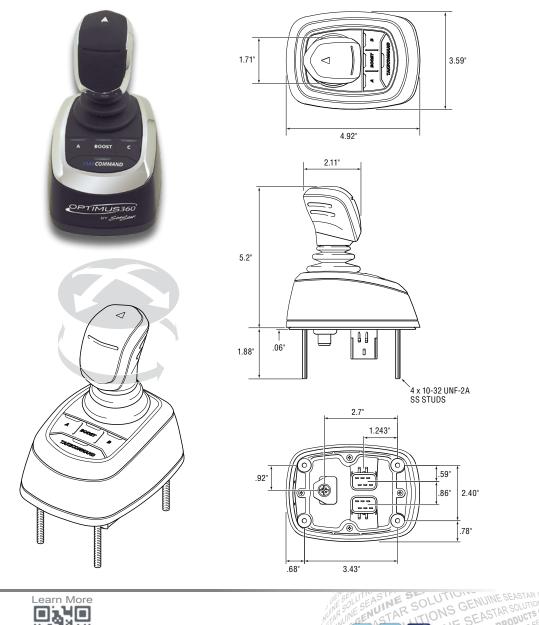
PRODUCTS

MARINE

COLUTIONS GENUINE

NE SEASTAR SOLUTIONS GEN

TECHNICAL DATA



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