

The Baanto™ 19" ShadowSense™ based touchscreen delivers innovative, high performance multi-touch capabilities in an open frame design. This is the perfect multi-touch solution for systems and chassis designed to use the ELO 1939L family of touch monitors.

Our patented technology and position sensing algorithms provide high performance touch recognition and tracking of multiple objects. Tsense™, a unique and proprietary ability to determine the thickness of a touch object, allows application developers to create improved gesture recognition algorithms and applications.

A perimeter based sensor design decouples the touch function from the protective glass providing improved optical and environmental performance and better immunity to surface debris and scratches.

The narrow and reduced height bezel simplifies the integration of a ShadowSense product and allows for a more creative industrial design process.

Targeted at embedded applications in Kiosk, Gaming, ATM, and Control and Monitoring, the worldwide agency approvals and certifications simplify your integration and product approval efforts.

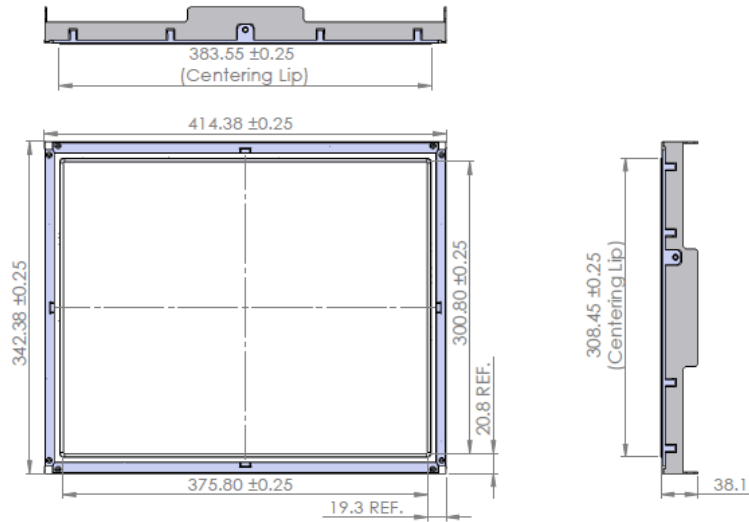
## Features

- True Multi-touch performance with 2, 3, and 4 touch point options available
- Tsense™ capable
  - Touch object size determination and reporting
- Solid touch activation
  - Senses solid objects 2 millimeters or greater in diameter
- 6 to 8 millisecond response time
- Sub-2 millimeter touch point accuracy
  - No ghosting or dead zones
- Static object detection and rejection
  - Continues to function with debris on the screen
- 3mm tempered glass with 91% optical clarity
  - 93% and 95% transmissivity options available
- IP65 rated front seal (bezel to glass)
- USB HID interface to host
  - Windows® 7 compliant
  - No drivers or CPU based algorithms
- Calibration free
  - Mechanically and thermally stable





## Mechanical Overview



## Environmental Specifications

- **Temperature**
  - Operating: 0°C to 40°
  - If your requirements are greater than this limit consult your BAANTO sales representative for information on commercial and industrial operating temperatures
  - Non-Operating: -20°C to 80°C
- **Humidity**
  - Operating: 5% to 90% RH non-condensing
  - Non-Operating: 5% to 90% RH non-condensing
- **Altitude**
  - Operating: sea level to 10,000 feet
  - Non-Operating: sea level to 30,000 feet
- **Shock**
  - Operating: 40 g per IEC 60068-2-27, half sine, 11ms duration, 3 axis
  - Non-Operating: 50 g per IEC 60068-2-27, half sine, 11ms duration, 3 axis (in approved packaging)
- **Vibration**
  - Operating: 1 g per IEC 60068-2-64 at 5 to 500Hz, 1 octave/min, 3 axis
  - Non-Operating: 5 g per IEC 60068-2-64 at 5 to 500Hz, 1 octave/min, 3 axis

## Part Numbering and Ordering Information

Ordering Part Number	Touchscreen size	Aspect	Number of	Tsense	Frame Options	Protective	Product Definition
		Ratio	Touchpoints	Present		Glass	
SDW-190S1-M2N-EE1-S1-PRD	19" Diagonal	4:3	Two (2)	No	ELO 1939L	3mm	Production Kit
SDW-190S1-M3N-EE1-S1-PRD	19" Diagonal	4:3	Three (3)	No	ELO 1939L	3mm	Production Kit
SDW-190S1-M4N-EE1-S1-PRD	19" Diagonal	4:3	Four (4)	No	ELO 1939L	3mm	Production Kit
SDW-190S1-M2T-EE1-S1-PRD	19" Diagonal	4:3	Two (2)	Yes	ELO 1939L	3mm	Production Kit
SDW-190S1-M3T-EE1-S1-PRD	19" Diagonal	4:3	Three (3)	Yes	ELO 1939L	3mm	Production Kit
SDW-190S1-M4T-EE1-S1-PRD	19" Diagonal	4:3	Four (4)	Yes	ELO 1939L	3mm	Production Kit

Product kit consists of: Sensor assembly, touchscreen controller, wiring harnesses, and mounting clips

To find out more about Baanto ShadowSense touch solutions, go to [www.baanto.com](http://www.baanto.com)



FCC, UL, cUL, and CE approvals are in process

All specifications and data presented herein are subject to change without advance notice. Please ensure you have the latest detailed specifications and drawings from Baanto prior to commencing any design with or use of Baanto products.

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