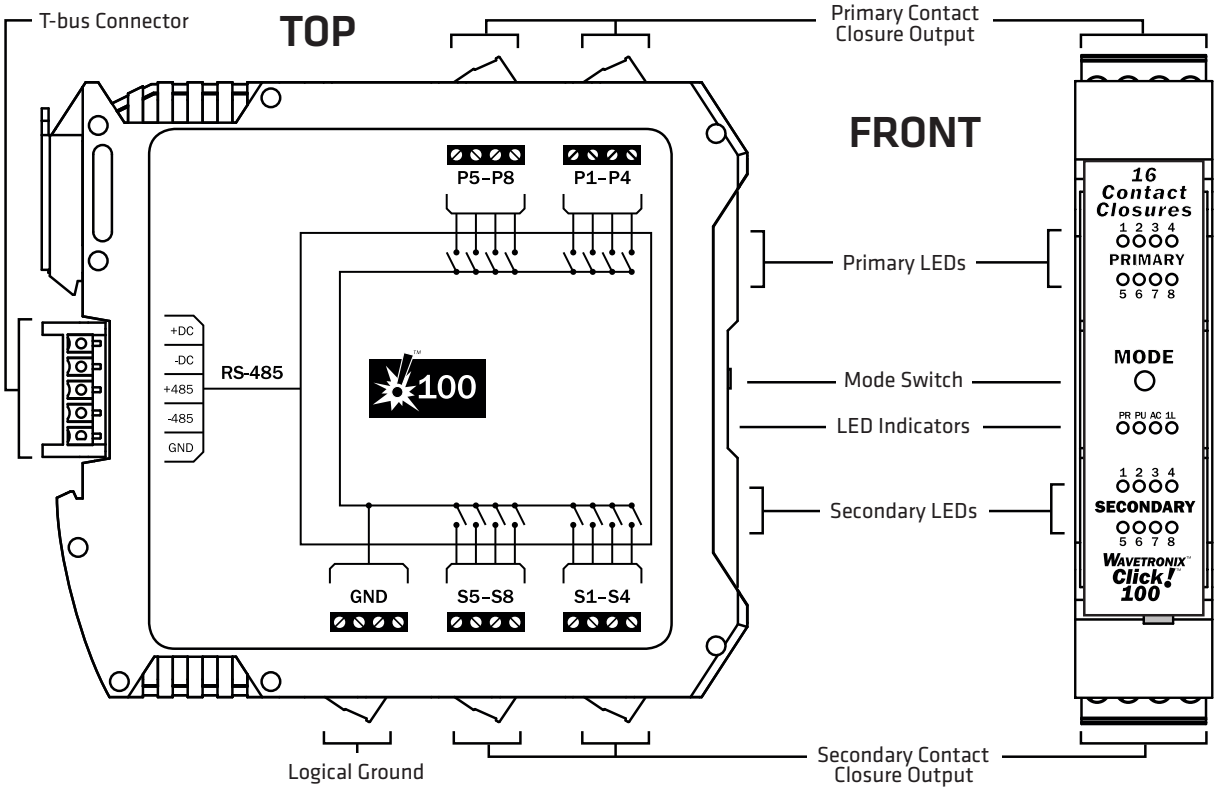
16-output contact closure module

The Click 100 collects real-time data from the Wavetronix SmartSensor and translates it into contact closure outputs. Sixteen separate outputs emulate up to eight lanes of two-loop data. The module mounts to a DIN rail and includes a hot-swappable power and communication bus for easy installation.

- Device has 16 contact closure outputs
- 8 lanes, dual loop traps
- Autobauds to SmartSensors
- Auto-configures loop trap emulation
- Keyed removable screw terminals
- 16 LEDs for contact closure verification
- 4 LEDs for mode selection
- Compatible with SmartSensor V, HD, and Advance
- Conformal coated
- NEMA tested
- Presence: dual-loop speed trap emulation with dynamic closure duration
- Pulse: dual-loop speed trap emulation with fixed closure duration (125 ms)
- Actuation: single loop emulation (true presence)
- One-loop speed: single loop emulation with contact closure duration based on speed



Technical specifications

Physical

- Weight: 0.3 lbs. (0.14 kg)
- Physical dimensions: 4.5 in. × 4 in. × 0.9 in. (11.4 cm x 10.2 cm x 2.3 cm)
- Ambient operating temp: -29°F to 165°F (-34°C to 74°C)
- Humidity: up to 95% RH

Mounting

- DIN rail–mountable
- Hot-swappable

Power

- Power supply voltage: 9 to 24 VDC
- Power consumption: 0.6 W

Connections

- Pluggable screw terminals for easy pre-wiring
- 5-position connector for power and RS-485 to and from the T-bus

Configuration features

- The automatic configuration process includes the following steps:
  - Establish communication with the RVSD via RS-485 bus
  - Retrieval of sensor units (English or metric)
  - Emulated loop spacing distance
- Data stored to memory and retained when power is disconnected
- LEDs on faceplate show vehicle detections

Data conversion

- Converts real-time serial data to contact closure data

Contact closure out-surge dissipation

- Dissipates up to a 600 W power surge received on the individual contact closure output terminals
- Maximum switching voltage: < 50 V

NEMA TS2-1998 testing

- Complies with the applicable standards stated in the NEMA TS2-1998 Standard
- Test results available for each of the following tests:
  - Shock pulses of 10g, 11 ms half sine wave
  - Vibration of .5 Grms up to 30 Hz
  - 300 V positive/negative pulses applied at one pulse per second at minimum and maximum DC supply voltage
  - Stored at -49°F (-45°C) for 24 hours
  - Stored at 185°F (85°C) for 24 hours
  - Operation at -29.2°F (-34°C) and 10.8 VDC
  - Operation at -29.2°F (-34°C) and 26.5 VDC
  - Operation at 165.2°F (74°C) and 26.5 VDC
  - Operation at 165.2°F (74°C) and 10.8 VDC

Testing

- Device is tested by the manufacturer before shipment

Extended support

- Extended support options are available from Wavetronix; contact a Wavetronix representative for more information

Warranty

- One-year warranty against material and workmanship defect (see Click Warranty datasheet for complete details)

Ordering information

Click 100
CLK-100

Contact us

801.734.7200
sales@wavetronix.com
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Bid specifications

1.0 General. This item shall govern the purchase and installation of a 16 output contact closure module (CCM) equivalent to the Wavetronix Click 100. The CCM shall be used to output contact closure data from a radar vehicle sensing device (RVSD) equivalent to the Wavetronix SmartSensor. Test results and other documentation demonstrating performance and capabilities shall be provided.

2.0 Product description. The CCM shall convert real-time serial data from the RVSD to contact closure data, allowing the RVSD to emulate loop-based traffic detection systems without replacing existing contact closure data collection infrastructure.

3.0 Physical. The CCM shall not exceed 0.3 lbs. (0.14 kg) in weight.

The CCM shall not exceed 4.5 in. × 4 in. × 0.9 in. (11.4 cm x 10.2 cm x 2.3 cm) in its physical dimensions.

The CCM shall operate over a temperature range of -29°F to 165°F (-34°C to 74°C).

The CCM shall operate in up to 95% humidity.

4.0 Mounting. The CCM shall mount to a DIN rail with a hot-swappable power and communication bus for quick installation and replacement.

5.0 Power. The CCM shall accept 9 to 24 VDC and shall operate using 0.6 W of average power.

6.0 Connections. The CCM shall have five pluggable screw terminals allowing communication to a contact closure data collector.

The CCM shall have a 5-position connector for connecting power and RS-485 communications to and from the T-bus.

7.0 Configuration features. After the CCM is properly connected to the RVSD, and the RVSD is configured to the user's desired specifications, then the user shall initiate the automatic configuration process. The CCM shall establish communication on the CCM RS-485 communication bus at one of the four available baud rates (9600 bps, 19200 bps, 38400 bps and 57600 bps). After communication between the CCM and RVSD is established the CCM shall retrieve sensor units (in either English or metric) and emulated loop spacing distance, and this data shall be stored to memory and shall be retained when power is disconnected.

The CCM shall have an individual LED for each emulated loop allowing the customer to visually see vehicle detections. There shall be eight red LEDs representing the primary loops and eight yellow LEDs representing the secondary loops.

8.0 Data conversion. The CCM shall collect real-time per vehicle data from a single RVSD and shall immediately output the collected information as contact closure data.

9.0 Contact closure out-surge dissipation. The CCM shall dissipate up to a 600 W power surge received on the individual contact closure output terminals. The CCM shall have a maximum switching voltage not to exceed 50 V.

10.0 NEMA TS2-1998 testing. The SSM shall comply with the applicable standards stated in NEMA TS2-1998. Test results shall be made available for each of the following tests:

- Shock pulses of 10g, 11 ms half sine wave
- Vibration of .5 Grms up to 30 Hz
- 300 V positive/negative pulses applied at one pulse per second at minimum and maximum DC supply voltage
- Stored at -49°F (-45°C) for 24 hours
- Stored at 185°F (85°C) for 24 hours
- Operation at -29.2°F (-34°C) and 10.8 VDC
- Operation at -29.2°F (-34°C) and 26.5 VDC
- Operation at 165.2°F (74°C) and 26.5 VDC
- Operation at 165.2°F (74°C) and 10.8 VDC

11.0 Testing. Before shipping, each SCM shall have passed a manufacturer's test.

12.0 Extended support. Extended support options shall be available. Contact the manufacturer representative for more information.

13.0 Warranty. The CCM shall be warranted to be free from material and workmanship defects for a period of one year from date of shipment.