

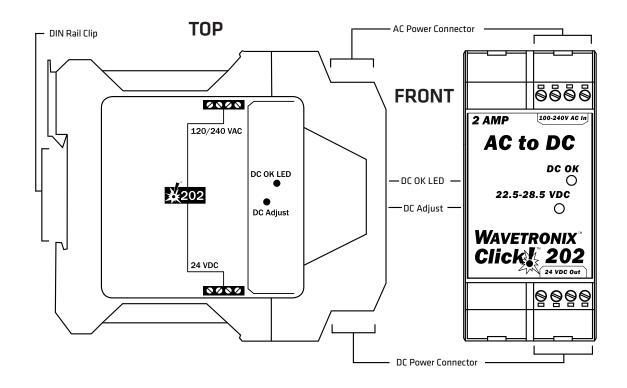
AC to DC power converter

The Click 201, 202, and 204 are 100 to 240 VAC to 24 VDC power converters, bringing reliable DC power to your traffic cabinet. With a 100% power reserve, the Click 201, 202, and 204 are the most effective remedy for static voltage dips, transient failures of supply voltage or continuous phase failures.



- Converts 100–240 VAC power to 24 VDC power
- Provides 1, 2, or 4 A of current, depending on model
- Mounts easily onto a DIN rail
- Meets NEMA TS2-1998 environmental specification
- UL listed
- Pluggable screw terminals allow for easier wiring and are redkeyed, allowing connectors to plug into only one specific jack
- Guaranteed mains buffering of more than 20 ms under full load
- DC OK LED indicates when device is working properly

- Features internal surge protection
- Potentiometer allows for adjustable DC voltage output
- Comes in three models:
 - ☐ Click 201: 1 A @ 24 VDC
 - □ Click 202: 2 A @ 24 VDC
 - □ Click 204: 4 A @ 24 VDC





Technical specifications

Physical

- Weight: 0.46 lbs. (0.21 kg) / 0.55 lbs. (0.25 kg) / 1.1 lbs. (0.48 kg)
- Physical dimensions: 4.5 in. × 3.9 in. × 0.9 in. (11.4 cm x 9.9 cm x 2.3 cm) / 4.5 in. × 3.9 in. × 1.7 in. (11.4 cm x 9.9 cm x 4.3 cm) / 4.2 in. x 3.9 in. x 2.7 in. (10.7 cm x 9.9 cm x 6.8 cm)
- Ambient operating temperature: -29°F to 140°F (-34°C to 60°C) with between 140°F and 165°F (60°C and 74°C) derating
- Humidity: up to 95% RH

Mounting

■ DIN rail-mountable

Connections

■ Pluggable screw terminals for easy pre-wiring

Power

- Click 201 power output at -29°F to 140°F (-34°C to 60°C): 1 A
- Click 202 power output at -29°F to 140°F (-34°C to 60°C): 2 A
- Click 204 power output at -29°F to 140°F (-34°C to 60°C): 4 A
- At temperatures between 140°F to 165°F (60°C and 74°C), output will decrease at a rate of 2.5% per degree Celsius temperature increase
- Click 201/202/204 power input: 100–240 VAC at 45–65 Hz

Surge protection

 Complies with the applicable standards stated in the IEC 61000-4-5 Standard for AC input power lines

Efficiency

■ Efficiency in converting AC input to DC: 80% or greater

UL listed

 Listed with UL under UL 508; complies with all applicable UL 508 standards.

NEMA TS2-1998 testing

- Click 201/202 comply with the applicable standards stated in the NEMA TS2-1998 Standard
- Test results available for each of the following tests for the Click 201/202:
 - ☐ Shock pulses of 10g, 11 ms half sine wave
 - $\hfill\Box$ 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
 - $\hfill\Box$ Operation at 165.2°F (74°C) and 26.5 VDC
 - □ Operation at 165.2°F (74°C) and 10.8 VDC

Ordering information

Click 201

CLK-201

Click 202

CLK-202

Click 204

CLK-204

Accessories

WX-CLK-210 - Click 210 circuit breaker

WX-CLK-230 - Click 230 AC surge protector

Contact us

801.734.7200

sales@wavetronix.com

www.wavetronix.com

Testing

- Device is tested by the manufacturer before shipment
- Tested under NEMA TS2-2003

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)



Bid specifications

1.0 General. This item shall govern the purchase and installation of 120–240 VAC to 24 VDC 1, 2 and 4 A power supplier (PS) equivalent to the Wavetronix Click 201, 202 and 204 respectively. Test results and other documentation demonstrating performance and capabilities shall be provided.

2.0 Product description. The PS provides a regulated 24 VDC output from a 120–240 VAC input of 1 A (Click 201), 2 A (Click 202) or 4 A (Click 204).

3.0 Physical. The 1 A PS shall not exceed 0.46 lbs. (0.21 kg) in weight. The 2 A PS shall not exceed 0.55 lbs. (0.25 kg) in weight. The 4 A PS shall not exceed 1.1 lbs. (0.48 kg) in weight.

The 1 A PS shall not exceed 4.5 in. \times 3.9 in. \times 0.9 in. (11.4 cm \times 9.1 cm \times 2.3 cm) in its physical dimensions. The 2 A PS shall not exceed 4.5 in \times 3.9 in. \times 1.7 in. (11.4 cm \times 9.1 cm \times 4.3 cm). The 4 A PS shall not exceed 4.2 in. \times 3.9 in. \times 2.7 in. (10.7 cm \times 9.9 cm \times 6.8 cm).

The PS shall operate in the temperature range of -29°F to 140°F (-34°C to 60°C), with between 140°F and 165°F (60°C and 74°C) derating.

The PS shall operate in humidity up to 95% RH.

- 4.0 Mounting. The PS shall mount to a DIN rail.
- **5.0 Connections.** The PS shall have pluggable screw terminals allowing the user to wire input and output of the AC/DC power supply before installation to make installation easy and to minimize incorrect wiring.

6.0 Power. The 1 A PS shall supply 1 A of current when the operating temperature is from -29°F to 140°F (-34°C to 60°C). The 2 A PS shall supply 2 A of current when the operating temperature is from -29°F to 140°F (-34°C to 60°C). The 4 A PS shall supply 4 A of current when the operating temperature is from -29°F to 140°F (-34°C to 60°C).

At temperatures between 140° F to 165° F (60° C and 74° C), output shall decrease at a rate of 2.5% per degree Celsius temperature increase to prevent device from becoming overheated.

The PS shall accept inputs from 100 to 240 VAC at frequency of 45 to 65 Hz.

- 7.0 Surge protection. The PS shall comply with the applicable standards stated in the IEC 61000-4-5 Standard for AC input power lines.
- 8.0 Efficiency. The PS shall have an efficiency of 80% or greater when converting AC input to DC.
- 9.0 UL listed. The PS shall be listed with UL under UL 508 and comply with all applicable UL 508 standards.

10.0 NEMA TS2-1998 testing. The 1 A PS and the 2 A PS shall comply with the applicable standards stated in NEMA TS2-1998. Test results shall be made available for these two devices for each of the following tests:

- Shock pulses of 10g, 11 ms half sine wave
- Vibration of 0.5 Grms up to 30 Hz $\,$
- · 300 V positive/negative pulses applied at one pulse per second at minimum and maximum DC supply voltage
- Cold temperature storage at -49°F (-45°C) for 24 hours
- High temperature storage at 185°F (85°C) for 24 hours
- Low temp, low DC supply voltage at -29.2°F (-34°C) and 10.8 VDC
- Low temp, high DC supply voltage at -29.2°F (-34°C) and 26.5 VDC
- High temp, high DC supply voltage at 165.2°F (74°C) and 26.5 VDC

11.0 Testing. Each PS shall be tested by the manufacturer before shipment.

The PS shall comply with the applicable standards stated in the NEMA TS2-2003 Standard.

- 12.0 Extended support. Extended support options shall be available. Contact the manufacturer representative for more information.
- 13.0 Warranty. The PS shall be warranted to be free from material and workmanship defects for a period of one year from date of shipment.