

# Traffic Control Power Supplies



Jasper Electronics designs and manufactures Traffic Control Power Supplies which are fully compliant to Caltrans TEES for use in 332, 334, 336, 342, 344, and 346 Series cabinets. Jasper also offers compliant units for use in Advanced Transportation Controller (ATC) High Voltage cabinets, NEMA cabinets, state of the art Traffic Intersection Control Systems, modern LED road signs, and other related applications. If you're upgrading an older system, Jasper offers smaller, lighter, more efficient, and much more reliable units than legacy supplies.

Jasper's traffic control power supplies are BABAA Compliant either as standard or optionally, depending on the model. These power supplies are the first choice for many state departments of transportation including California, New York, Colorado, Georgia, and Alabama, among others. Custom traffic control power supplies are our specialty!



















# **Traffic Control Product Catalog**

### TC2070-4A



TC2070-4 models are chassis mounted, fully enclosed, 4-output (with standby) switching power supplies capable delivering up to 74 Watts DC. They are designed for non-redundant "cold pluggable" installation in Caltrans 332, 334, and 336 cabinets, with variations also available for NEMA TS1 and TS2 cabinets. AC input and PE are via a non-detachable power cord at the rear. DC output power, signal, and control connections are through 10-circuit and 12-circuit connectors on the front of the supply. Adjacent on the front panel is a line-side

operator accessible input fuse, an On/Off switch, and output condition indicator LEDs. These units are convection cooled, with an extended operating temperature range. They are directly interchangeable with all other Caltrans approved 2070-4 type modules with identical AC input ratings. Available with energy efficient Power Factor Correction. This model is available in 120 or 220 VAC, 50 or 60 Hz variations, with or without power factor correction, with or without extra long cables. Consult factory for details. BABAA Compliant optional.

### **TC206L**



TC206L is a switching power supply delivering up to 120 Watts of DC power through a single, regulated +24V DC output. It provides full output regulation across changes in AC Line voltage and output load over the full operating temperature range of -34°C to +74°C. Power Factor Correction is provided. This model has a functional AC input range of 80V AC to 270V AC input and 47 to 63Hz. 206L is an open frame design, with the

main PCB assembly installed in a grounded sheet metal chassis designed to be rack mounted in a TEES type PDA #2L, PDA #3L or PDA #4L assembly as commonly found in 332, 334, or 336 style traffic signal control cabinets. This unit is directly interchangeable with earlier Caltrans Model 206 linear type power supplies, without requiring cabinet modifications. BABAA Compliant optional.

### TC206LS



TC206LS, also known as Model 206LS, is a chassis mounted, open frame, single output switching power supply capable delivering up to 120 Watts DC, and intended specifically for use in Caltrans TEES 332L, 334L and 336L cabinets fitted with PDA2-LS Power Distribution Assemblies. These are

designed for non-redundant "cold pluggable" installation. AC input, PE, and DC power output connections are through a 6-circuit connector at the rear of the supply. This unit is convection cooled, with an extended operating temperature range. BABAA Compliant standard.

### TC206L-NY



TC206L-NY switching power supply capable of delivering up to 120 Watts of DC power through a single, regulated +24V DC output. It provides full output regulation across changes in AC Line voltage and output load over the full operating temperature range of -34°C to +74°C. Power Factor Correction is provided, reducing peak AC Line input current and

the associated stress on wiring. This model has a functional AC input range of 80V AC to 270V AC input and 47 to 63Hz. Model TC206L-NY is designed to be rack mounted in a TEES type PDA #2L, PDA #3L or PDA #4L assembly as commonly found in 332 or 334 style traffic signal control cabinets as used by NYSDOT. BABAA Compliant standard.



















# Traffic Control Product Catalog

### TC2217



TC2217 ATC power supply module is fully compliant to the Advanced Transportation Controller (ATC) Cabinet Standard 5301, v02.02, March 18, 2019, and designated as ATC 5301 Model 2217. Generally, Model TC2217 is a 2-output switching power supply capable delivering up to 120 Watts DC and intended specifically for use in ATC High Voltage (HV) Cabinets. These are designed for non-redundant "cold pluggable" installation in the end product.

AC input, PE, and DC output power connections are through a 7-circuit connector on the rear of the supply as shown. Condition indicator LEDs are all visible on the front panel. Model TC2217 is convection cooled, with an extended operating temperature range. It is designed to be directly interchangeable with 2217 modules from other vendors. BABAA Compliant optional.

### **TC2216**



TC2216 ATC module is fully compliant to the Advanced Transportation Controller (ATC) Cabinet Standard 5301, v02.02, March 18, 2019, and designated as ATC 5301 Model 2216-24-HV. Generally, Model TC2216-24 is a 19.0" rack mounted, fully enclosed 2-output switching power supply capable of delivering up to 175 Watts DC and intended specifically for use in ATC High Voltage (HV) Cabinets. These are designed for non-redundant "cold pluggable" installation in the end product. AC input and PE is via a detachable power cord inlet, and DC output power

connections are through a 6-circuit connector, both on the rear of the supply as shown. User accessible line-side input and individual output fuses, as well as condition indicator LEDs, are all visible on the front panel. Front panel test points allow the user to verify output voltage set points. Model TC2216-24 is convection cooled, with an extended operating temperature range. It is designed to be directly interchangeable with 2216-24 modules from other vendors. BABAA Compliant optional.

### **TC2219**



Jasper Electronics Model TC2219 component power supply module is fully compliant to the Advanced Transportation Controller (ATC) Cabinet Standard 5301, v02.02, March 18, 2019, and designated as ATC 5301 Model 2219. Generally, Model TC2219 is a 2-output switching power supply capable delivering up to 120 Watts DC and intended specifically for use in ATC High Voltage (HV) Cabinets. These are

designed for non-redundant "cold pluggable" installation in the end product. AC input, PE, and DC output power connections are through a 7-circuit connector on the rear of the supply. This unit is convection cooled, with an extended operating temperature range, and designed to be directly interchangeable with 2219 modules from other vendors. BABAA Compliant optional.

**TC250** 



TC250 NEMA Power Supply module designed to meet or exceed the requirements of NEMATS 2-2016 V03.07, as required for TS-2 Type 1 and TS-2 Type 2 traffic control cabinets that incorporate Bus Interface Units. This unit is rack mounted and fully enclosed, providing up to 132 Watts to two regulated DC outputs and a single unregulated AC output, and include a line frequency reference for use in detector racks, load switches and auxiliary components of traffic control cabinets.

TC250 modules are convection cooled, with an extended operating temperature range. These units are designed for nonredundant "cold pluggable" installation in the end product. AC input, PE, DC power output and signal connections are via 12-circuit connector on the rear of the chassis. Line-side input fuse and individual output fuses are user accessible on the front panel, adjacent to I/O LED condition indicators. BABAA Compliant optional.



















# **Traffic Control Product Catalog**

### **TC206E**



TC206E, also known as Model 206E, is a switching power supply capable of delivering up to 240 Watts of DC power through a single, regulated +24V DC output. The unit is an open frame design, with a main PCB assembly installed in a grounded sheet metal chassis designed to be rack mounted in a TEES type PDA #2LX or PDA #3LX assemblies commonly found in Caltrans 332LS, 336LS, 342LX, 344LS and

346LX style traffic signal control cabinets. This unit provides full output regulation across changes in AC Line voltage and output load over the full operating temperature range of -34°C to +74°C. Power Factor Correction is provided reducing peak AC Line input current and the associated stress on wiring. Functional AC input range is 80V AC to 150V AC input and 47 to 63Hz. BABAA Compliant standard.

### **TC301**



TC301 is designed for LED Road Sign and Traffic Control applications where high power density and high reliability are required. This unit converts universal 100-240 VAC input to 5V @ 60A output, with the ability to operate over a wide

temperature range. It can be customized to nearly any applicable transportation application! BABAA Compliant optional.

### **TC401**



TC401 This high efficiency / high reliability power supply has a wide universal input voltage range of 90-264VAC, dual outputs at 12 and 48 VDC, and wide operating temperature of -25°C to +65°C.TC401

features output short-circuit protection, over-current protection, over-voltage protection, over-temperature protection, and parallel current sharing. It is available as BABAA Compliant optionally.

### PDA2-LS



The compact model PDA-2LS is identical in function and control to the PDA-2L defined in TEES 2009, but with the overall height reduced I.75" (4.445cm) to 5.25" (13.335cm) allowing space for the addition of a drawer shelf for laptop support in 336L, 345LX cabinets, and space in 332L and 342LX with a Master Controller or 2 Model 2070 controllers. Several other design improvements have been

incorporated, such as moving the rear panel terminal block connection to inside the chassis to prevent inadvertent hazardous contact by service technicians working in the cabinet. The PDA- 2LS is powered by the TC206LS power supply, a compact version of our proven model TC206L. Listed on the California DOT Oualified Products List.









# **BABAA Compliance Chart**

MODEL DESIGNATION	APPLICATION	AVAILABLE IN BABAA COMPLIANT CONFIGURATION	AVAILABLE IN NON- BABAA COMPLIANT CONFIGURATION
TC2070-4A	332, 334, 336	Yes - Optional	Yes - Standard
TC2070-4N	NEMA TS1, TS2	Yes - Optional	Yes - Standard
TC206L	332, 334, 336	Yes - Standard	Yes - Optional
TC206LS	332, 334, 336	Yes - Standard	Yes - Optional
TC206L-NY	332, 334	Yes - Standard	Yes - Optional
TC2217	ATC	Yes - Optional	Yes - Standard
TC2216	ATC	Yes - Optional	Yes - Standard
TC2219	ATC	Yes - Optional	Yes - Standard
TC250	NEMA TS1, TS2	Yes - Optional	Yes - Standard
TC206E	332, 336, 342, 344, 346	Yes - Standard	Yes - Optional
TC301	LED Road Signs	Yes - Optional	Yes - Standard
TC401	General Purpose	Yes - Optional	Yes - Standard
PDA2LS	336LS, 346LX	Yes - Standard	No
TC2248	ATC	Yes - Optional	Yes - Standard

### **CUSTOM CONFIGURATIONS**

Jasper Electronics can adapt any of our TC model series to meet user specified unique, non-standard configurations.



## CONTACT

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