

# TR100

MOBILE POWER ADAPTER



## TR100 MOBILE POWER ADAPTER

- Thermal Shutdown
- 100 Watts continuous from 10.6V-16V at 55°C
- Short Circuit Protection
- Input Overvoltage Shutdown
- Input Undervoltage Shutdown
- Output Overvoltage Shutdown
- No Minimum Load
- Three Year Warranty
- 12 Watts per cubic inch @ 55°C with no air needed

### TR100

Ault Part No.	Voltage DC	Output Current (Amps)	Max Watts
TR10015	15.0V	6.67	100
TR10016	16.0V	6.25	100
TR10018	18.0V	5.55	100
TR10019	19.0V	5.26	100
TR10020	20.0V	5.00	100
TR10024	24.0V	4.16	100

### Ault Part No. Key

TR100	15	A	1-	00	XX
Product Family Name	Output Voltage	Design Revision Changes	Input Voltage	Input Config.	Denotes Standard or Custom Requirements 01=Standard



AULT INCORPORATED

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# TR100

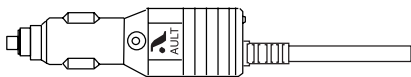
## MOBILE POWER ADAPTER

### Electrical

Input	10.6 - 16 Vdc. Adapter turns on with an input of 10.5Vdc and the unit will turn off at an input of 9.5Vdc
Input Cable	24" 14AWG cable with 20A 3AG fused auto accessory plug hard-wired to pcb terminals for secure, low-loss connection. See table for connector options.
Start Delay	<2 Seconds
Turn-On Overshoot	<.5%
Efficiency	>95% at full load with 12Vdc input. (Measured at PCB input and output).
Switching Frequency	150kHz +/- 10%
Switching Noise	< 50mV pk-pk at full load, 20MHz BW
Output Cable	48" 16AWG cable hardwired to pcb terminals. Application end is terminated to mate with desired application. See table for connector options.
Ripple	1% of rated voltage maximum
Voltage Setpoint Accuracy	+/-1% typical
Combined Line and Load Voltage Regulation	+/- 1% at load connections
Output Power Indicator	Green LED (TBD)

### Input Configuration

01



Pin Out Code	Center contact positive (+)
Description	Mobile/ Auto plug with fuse protection
Suggested Mating	Plugs into standard auto accessory socket
Other connectors (standard or custom) available upon request	
TUV approvals pending	

02



Pin Out Code	Color-coded cable, red positive (+)
Description	Eyelet terminals with in-line fuse protection
Suggested Mating	Terminal block/ binding post
Other connectors (standard or custom) available upon request	
UL & TUV approvals pending	

### Protection

Short Circuit	Auto recovery when short is removed.
Current Limiting	125% Min. above rated current.
Input Overvoltage	Adapter shuts down when the input is greater than 16Vdc +/-300mV. Auto recovery when input drops below 15.5Vdc +/- 300mV.
Input Undervoltage	Adapter shuts down when the input is less than 9.5dc +/-250mV. Auto recovery when input rises above 10.5Vdc +/- 250mV.
Input Reverse Polarity	Diode protected by blowing input fuse
Output Overvoltage Protection	Adapter shuts down if the output is greater than 120-130% of the rated output voltage.
Thermal Shutdown	The unit is internally protected against all over temperature conditions.

### Safety Approvals

Agency Listings	Pending: UL & TUV approvals pending. See connector options for detail
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### Mechanical

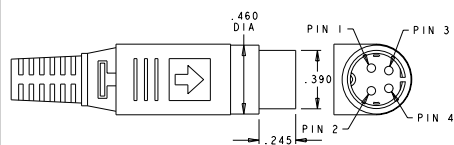
Case Dimensions	3.25L x 2.375W x 1.15H (in)
Weight	12.6 oz. with input/output harness

### Environmental

Operating Temperature	-40°C to +55°C
Storage Temperature	-20°C to 85°C

### Output Connector

49



Pin Out Code	Pins 1 & 2 positive (+). Pins 3 & 4 return (-)
Description	Snap & lock power plug/ 4 pin/ prefer 20AWG
Suggested Mating	Kycon KPJ-4S
Other connectors (standard or custom) available upon request	
UL & TUV approvals pending	



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