



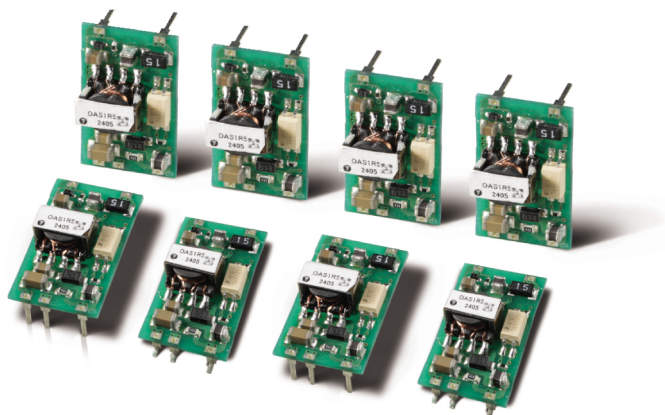
# ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

DC/DC SWITCHING POWER SUPPLY  
SINGLE CHANNEL OUTPUT  
1.5 WATTS

## OAS1R5-48 SERIES

*RoHS*



### General Description

### Features

### Options

### Application

#### Input

Input Voltage DC48V  
Input Voltage Range: DC36~76V

Frequency:

Frequency Range:

Phase:

Inrush Current: \*1, \*4



ETA USA

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# ETA-USA

## HIGH QUALITY SWITCHING POWER SUPPLIES

| Output Characteristic      |                            | Models      |             |             |             |
|----------------------------|----------------------------|-------------|-------------|-------------|-------------|
|                            | Unit                       | OAS1R5-48_3 | OAS1R5-48_5 | OAS1R5-4812 | OAS1R5-4815 |
| Output Voltage             | Vdc                        | 3.3         | 5           | 12          | 15          |
| Output Current (typ.)      | A                          | 0.4         | 0.3         | 0.13        | 0.1         |
| Ripple (max)               | mVpp<br>-20<br>to<br>55°C  | 80          | 80          | 120         | 120         |
|                            | mVpp<br>-40<br>to<br>-20°C | 120         | 120         | 150         | 150         |
| Noise (max)                | mVpp<br>-20<br>to<br>55°C  | 120         | 120         | 150         | 150         |
|                            | mVpp<br>-40<br>to<br>-20°C | 200         | 200         | 200         | 200         |
| Voltage Adjust Range       | V                          | ±5%         |             |             |             |
| Rise time                  | mS                         | 20 mS max   |             |             |             |
| Hold up time               | mS                         | 20 mS max.  |             |             |             |
| Regulation                 |                            |             |             |             |             |
| a. Line Regulation [max]   | mV                         | 20          | 20          | 48          | 60          |
| b. Load Regulation [max]   | mV                         | 40          | 40          | 100         | 120         |
| c. Temperature Coefficient | -20<br>to<br>55°C          | 50          | 50          | 150         | 180         |
|                            | -40<br>to<br>55°C          | 80          | 80          | 240         | 290         |
| d. Drift(maximum)          | mV                         | 20          | 20          | 48          | 60          |

|                 |   |                        |
|-----------------|---|------------------------|
| Efficiency *1   | % | 72~77% typ.            |
| Power Factor *1 |   | No power factor needed |





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## HIGH QUALITY SWITCHING POWER SUPPLIES

| Environmental Specification      |                                                                                               |
|----------------------------------|-----------------------------------------------------------------------------------------------|
| Operating Temperature*3          | -40 to +85 °C                                                                                 |
| Operating Humidity               | 20~95% RH non condensing                                                                      |
| Storage Temperature              | -40 to +100 °C                                                                                |
| Storage Humidity                 | 20~95% RH                                                                                     |
| Withstanding Voltage             |                                                                                               |
| Isolation Resistance             | Primary-Secondary-Frame Ground 100MΩ(minimum) by DC500V insulation tester                     |
| Vibration                        | 10-55Hz:19.6m/s <sup>2</sup> , 3 minute cycle each along X,Y,Z axes(non-operating) for 1 hour |
| Shock                            | 196 m/s <sup>2</sup> on x,y,z axis                                                            |
| Cooling                          | Convection/ Air forced                                                                        |
| Leakage current                  |                                                                                               |
| Environmental Agencies           |                                                                                               |
| Line Conducted Noise [EMI]       |                                                                                               |
| Line Harmonic Distortion/Current |                                                                                               |
| Safety                           | UL60950-1 C-UL<br>CE Marking : EN60950-1                                                      |
| Function/Protection              |                                                                                               |
| Over current Protection          | Vertical limiting at 105% min of rated current, automatic recovery                            |
| Over voltage Protection          |                                                                                               |
| Remote Sense                     |                                                                                               |
| Remote Control                   |                                                                                               |
| Series Operation                 |                                                                                               |
| Parallel Operation               |                                                                                               |
| Driving Indicator                |                                                                                               |
| Mechanical                       |                                                                                               |
| Dimension [mm]                   | 21.4W × 6.5H × 12.2L                                                                          |
| Weight [g] (max)                 | 2                                                                                             |

Conditions:

- \*1 Rated input and Rated output
- \*2 at Output current quick change 25% to 75%
- \*3 At 100% load (convection cooling)
- \*4 Cold start at 25 °C Ambient temp.



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# **ETA-USA**

**HIGH QUALITY SWITCHING POWER SUPPLIES**

**Derating Curves**

**Efficiency Curves**

**Block Diagram**

**Mechanical Drawings**



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