

DC-DC

VI-200 and VI-J00 Family DC-DC Converters

Over 3000 Standard Models

NEW
Wide Range
110 Volt
Input

- Over 4 Million Modules Shipped
- 20 Million Hours Demonstrated MTBF

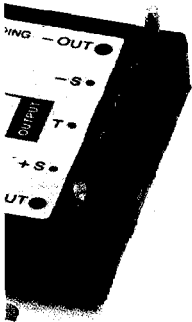
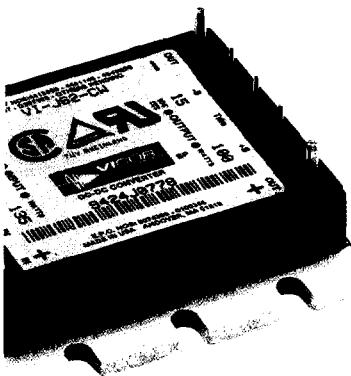


The VI-200 and VI-J00 families of DC to DC converters have set the standard for high power and reliability in the component power industry. Operating at frequencies of up to 2 MHz, these high density power modules and their "zero-current-switching" topology are field proven through an installed base of over 4 million units.

Compact, easy to use and highly efficient, VI-200 and VI-J00 converters feature wide input voltage range, remote sense, enhanced output programmability, logic disable and low quiescent current. VI-200 products measure 4.6" x 2.4" x 0.5" and also feature output overvoltage protection and thermal shutdown. VI-J00 products, at half the size of VI-200 converters, operate to 100°C. Both product families are safety agency approved, accelerating your time to market.

For higher output power requirements, VI-200 family booster modules may be slaved to a driver module, creating synchronous arrays capable of providing kilowatts of power. E-grade versions of both products make VI-200 and VI-J00 family converters one of the best dollar per watt power values available today. Constructing a total power system has never been easier...or more cost-effective.





Part Numbering & Electrical Specifications

Summary Electrical Characteristics

| Full and Junior Size Modules | Typical C, I, M | E |
|---------------------------------|-----------------|----------|
| Set Point Accuracy | 0.5% | 1.0% |
| Load/Line Regulation | 0.05% | 0.5% |
| Output Temperature Drift | 0.01%/°C | 0.02%/°C |
| Peak to Peak Output Ripple | 1% | 3% |
| High Trim/Program | 110% | 110% |
| Low Trim/Program | 5% | 70% |
| Total Remote Sense Compensation | 0.5V | 0.5V |
| OVP Set Point* | 125% | 125% |
| Current Limit | 115% | 105-135% |
| Efficiency | 80-90% | 78-88% |

* Not available in junior size modules.

Typical Model: **V I - 2 6 0 - E U**

Input: 300 VDC; Output: 5 VDC at 200 Watts

\$150 Single Quantity E-Grade

Typical Model: **V I - J 6 1 - E X**

Input: 300 VDC; Output: 12 VDC at 75 Watts

\$99 Single Quantity E-Grade

- 2** = Full Size VI-200 Module Family
4.6"L x 2.4"W x 0.5"H
- B** = Full Size Booster Module
4.6"L x 2.4"W x 0.5"H
- J** = Junior Size VI-J00 Module Family
2.28"L x 2.4"W x 0.5"H

| Product Grade | | |
|---------------|----------------|-----------------|
| | Full Size | Junior Size |
| E | -10°C to +85°C | -10°C to +100°C |
| C | -25°C to +85°C | -25°C to +100°C |
| I | -40°C to +85°C | -40°C to +100°C |
| M | -55°C to +85°C | -55°C to +100°C |

| Output Voltage | | | |
|----------------|--------|----------|-------|
| Z | = 2V | 2 | = 15V |
| Y | = 3.3V | 3 | = 24V |
| 0 | = 5V | L | = 28V |
| 1 | = 12V | 4 | = 48V |

1 to 95V, consult factory.

| Output Power/Current | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| Full Size Module | | Junior Size Module | |
| V _{out} ≥ 5V | V _{out} < 5V | V _{out} ≥ 5V | V _{out} < 5V |
| Y = 50W | Y = 10A | Z = 25W | - |
| X = 75W | X = 15A | Y = 50W | Y = 10A |
| W = 100W | W = 20A | X = 75W | X = 15A |
| V = 150W | V = 30A | W = 100W | W = 20A |
| U = 200W | U = 40A | | |

| Nominal | Input Voltage Range | VI-200 | VI-J00 |
|--------------|---------------------|--------|--------|
| 0 = 12V | 10 - 20V | (4) | (1) |
| 1 = 24V | 21 - 32V | (8) | (5) |
| W = 24V | 18 - 36V | (8) | (3) |
| 2 = 36V | 21 - 56V | (6) | (1) |
| 3 = 48V | 42 - 60V | (10) | (5) |
| N = 48V | 36 - 76V | (10) | (2) |
| 4 = 72V | 55 - 100V | (9) | (1) |
| T* = 110V | 66 - 160V | (7) | - |
| 5 = 150V | 100 - 200V | (9) | (5) |
| 6 = 300V | 200 - 400V | (10) | (5) |
| 7 = 150/300V | 100 - 375V | (5) | (1) |

* Consult factory for availability of "T" input VI-J00s.

| Max. Output For | 5V Outputs | > 5V Outputs | < 5V Outputs |
|-----------------|------------|--------------|--------------|
| (1) | 50W | 50W | 10A |
| (2) | 50W | 50W | 15A |
| (3) | 50W | 75W | 15A |
| (4) | 75W | 75W | 15A |
| (5) | 75W | 100W | 20A |
| (6) | 100W | 100W | 20A |
| (7) | 100W | 150W | 30A |
| (8) | 150W | 150W | 30A |
| (9) | 150W | 200W | 40A |
| (10) | 200W | 200W | 40A |

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