

Vigtron's MaxiiPower™ Vi10120 DIN Rail Power Supply is designed for hardened applications. A wide operating temperature range of -25°C to 70°C assures reliable operation for many mission critical operations. It provides Over Load, Over Voltage, Over Temperature and Short Circuit Protection. The Vi10120's can provide 150% peak load up to 180W. A DC-OK relay provides notification in the event of failures. Outputs of multiple Vi10120s can be connected together in parallel to increase the total power or serve as a back up supply. Multiple DIN Rail mountings simplifies installation.



The Vigtron Vi10120 can be configured for a wide variety of applications to provide both additive and back up power.

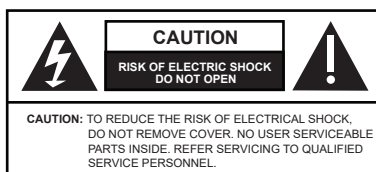
Important Safety Warning

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Install in accordance with the manufacturer's instructions.
- This installation should be made by a qualified service person and should conform to all local codes.
- DO NOT bundle low-voltage signals in the same conduit as high-voltage wiring.
- To reduce the risk of fire or electrical shock, do not expose these products to rain, moisture, dripping or splashing.
- No objects filled with liquids, such as vases, shall be placed on Vigtron equipment.
- DO NOT install the unit in a place where the operating ambient temperature exceeds 70°C.
- Make sure that the external power supply output voltage is in the recommended range.
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including DVRs) that produce heat.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as a power supply cord or plug is damaged, liquid has been spilled, or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- The mains plug is used as the disconnect device and shall remain readily operable.
- Do not use this device in equipment where malfunction may cause severe personal injury or threaten human life.

⚠ WARNING! - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

⚠ WARNING! - This apparatus is a Class I product. This product must be connected to a mains socket outlet through an AC to DC Power supply.

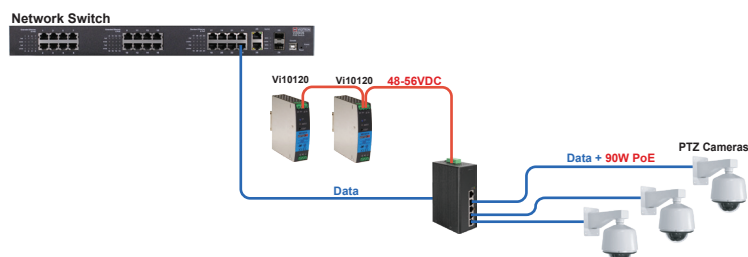
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Application Drawing



The Vi10120 can be used to power a wide variety high power PoE switches and Midspans.



Multiple Vi10120 can share current to power a wide variety high PoE power PoE switches or Midspans. Also can be used as redundant power supply.

Installation Notes

- Install the device in an enclosure providing protection against electrical, mechanical and fire hazards.
- Install the device onto a DIN-rail according to TS-35/7.5 or TS-35/15 with the input terminals on the bottom of the device.
- Connect the device to a proper PE (Protective Earth) connection before use.
- Do not obstruct airflow and do not cover ventilation grid of the device.
- Use appropriate copper cables that are designed for a minimum operating temperature of 90°C.
- When using stranded wires ensure that all strands of the wire enter the terminal connection.
- Unused screw terminals should be securely tightened.
- No condensation or frost is allowed.
- The output voltage can be adjusted with a small flat-blade screwdriver on the front of the unit.
- The green DC-OK LED turns ON when the output voltage is above 90% of the adjusted voltage and it Turns OFF when output voltage is below 80%.
- The DC-OK relay monitors the output voltage and the contact is closed when the DC-OK LED is on.
- Multiple devices can be paralleled to increase the output power or use as back up power source.
- Output current and output power must not exceed the rated values on this specification.
- Do not exceed the device load rated on the De-rating Chart.

This device is designed for installation in an enclosure and is intended for commercial use, such as Security, industrial control, process control, monitoring, etc.

Do not use this device in equipment where malfunction may cause severe personal injury or threaten human life.

Technical Specifications*

Electrical

Output:

Output Power	120W, 48-56VDC (Adjustable) @ 2.5A Max.
Ripple and Noise	≤240mV at 0~70°C ≤240mV at -25°C
Voltage Accuracy	±1.0%
Line Regulation	±0.5%
Load Regulation	±1.0%
Set-up Time	<250mS@230VAC, <500mS@100VAC
Hold up Time	≥20mS (230VAC input, Full load)
Temperature Coefficient	±0.03%/°C
Overshoot and Undershoot	<5.0%

Input:

Voltage Range	85VAC~264VAC, 130VDC-350VDC
Frequency Range	47Hz~63Hz
Power Factor	0.99/100VAC, 0.95/230VAC
Efficiency	92%
AC Current	<1.5A/100VAC, <0.65A/230VAC (max.)
Inrush Current	<30A/100VAC, <60A/230VAC Cold start
Leakage	Input-Output <0.25mA, Input-PG:<3.5mA

Protection:

Over Load	110%~150% of rated current, Auto recovery
Over voltage	58~65VDC, constant voltage, Auto recovery
Over temperature	100±5°C, shut down O/P, Auto recovery
Short Circuit	Long-term mode, Auto recovery
DC-OK LED	V On: when output is up to 90% of rated output voltage V Off: when output is down to 80% of rated output voltage
DC-OK Relay	Max 30V/1A or 60V/0.3A or 30Vac/0.3A, Resistive load

Regulatory

Safety	UL508, UL60950, EN60950, CE
EMC Emission	EN55022, EN55024, FCC PART 15 Class B
EMC Immunity	EN61000-4-2,3,4,5,6,8,11; heavy industry level
Environmental	RoHS, WEEE

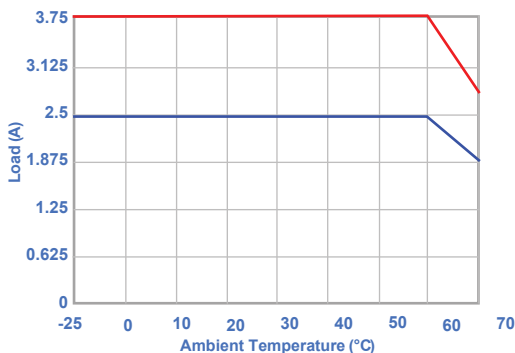
Environmental

Humidity	Operating: 20 to 90%, non-condensing Storage: 5 to 95%, non-condensing
Temperature	Operating: -25°C to +70°C Storage: -40°C to +85°C

Mechanical

Dimensions	4.68x1.26x4.88in, 119x32x124mm (LxWxH)
Weight	1.3 lbs (590g)
Housing Material	Sheet Metal

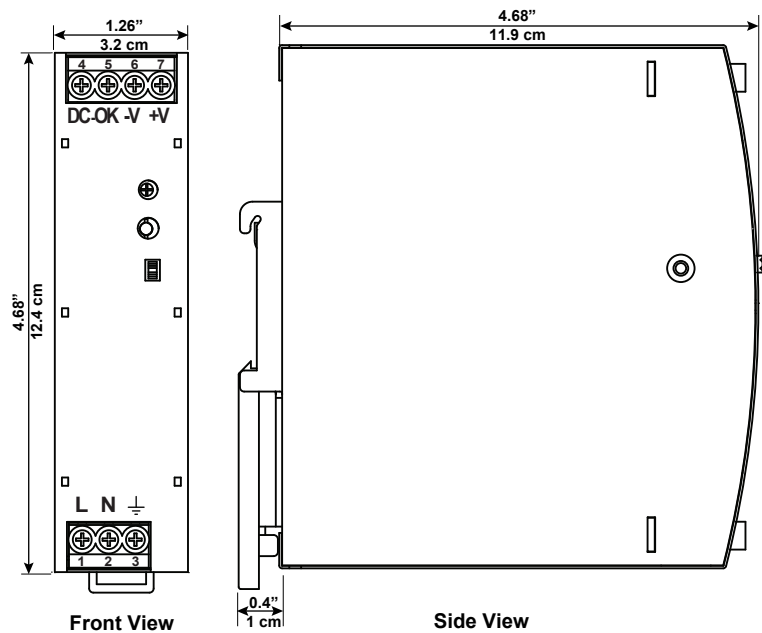
De-rating Chart



Connectors Pin Assignment

Function	Pin#	Name	Description
AC Input	1	L	Line
	2	N	Null
	3	PG	Ground
DC Output	6	-V	DC Ground
	7	+V	48~56VDC
DC Relay	4	DC-OK Relay Contact	Max 30V/1A or 60V/0.3A or
	5	DC-OK Relay Contact	30Vac/0.3A Resistive load

Mechanical Drawing



Ordering Information

Model	Description
Vi10120	120W Hardened Din Rail Power Supply
Vi10240	240W Hardened Din Rail Power Supply
Vi10480	480W Hardened Din Rail Power Supply

Limited Lifetime Warranty

Vigatron, Inc. warrants that all Vigatron products ("Product"), if used in accordance with these instructions, will be free of defects in material and workmanship for lifetime defined as the duration period of time until product end of life is announcement. After which Vigatron will continue to provide warranty services for a period of 3 years. Period covering valid warranty will be determined by proof of purchase in the form of an invoice from an authorized Vigatron dealer.

Warranty will only be provided for as long as the original end user purchaser owns the product. Warranty is not transferable. At Vigatron's option, defective product will be repaired, replaced or substituted with a product of equal value. This warranty does not apply if, in the judgment of Vigatron, Inc., the Product fails due to damage from shipment, handling, storage, accident, abuse or misuse, or if it has been used or maintained not conforming to Product manual instructions, has been modified, or serial number removed or defaced. Repair by anyone other than Vigatron, Inc. or an approved agent will void this warranty. Vigatron, Inc. shall not under any circumstances be liable to any person for any incidental, indirect or consequential damages, including damages resulting from use or malfunction of the product, loss of profits or revenues or costs of replacement goods. The maximum liability of Vigatron, Inc. under this warranty is limited to the original purchase price of the Product only.

*Specifications subject to change without notice.



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