

# Vi1120

## Vi1120 High Power 120W 56V Power Supply

### Features

- Universal power input 100 ~ 240 Vac / 47 ~ 63 Hz Input, without slide switch
- High power Output: +56V / 0 ~ 2.1A
- Compact size: 168.1x65.9x39 mm. (LxWxH)
- High Energy Efficiency Safety: Complys with major safety and emission standards EMI: CE / FCC Class B; Conduction & Radiation Met
- Highest degree of safety and protection features:
  - Over Voltage Protection (OVP) V out \* (105% ~ 150%)
  - Over Current Protection(OCP) I out \* (105% ~ 150%)
  - Short Circuit Protection (SCP) Automatic recovery after short-circuit fault being removed
- Low power consumption saving operating costs
- Meet Energy Star V / Erp ( Stage 2 ) / MEPS V



### Applications

- Designed for 802.3at and 60W high power applications.
- Power source for applications requiring PoE power for PTZ, heaters and blowers.
- Design for telecommunications, computer, Industrial and office automation systems require high power sources.
- Designed to work with Vi2701 Rx/Tx to provide extended distance 60W power.
- Designed to work with Vi2804P to provide 4 ports of 802.3at power output.

The Vi1120, high power 120W 56V power supply, is designed to meet the power requirements of CCTV products requiring 802.3at and PoE +++ power. With Level 5 energy efficiency the Vi1120 provides the industry's highest power with the lowest power consumption meeting Level V energy efficiency standards. Over Voltage Protection (OVP), Short Circuit Protection (SCP), and Over Current Protection (OCP) monitor output conditions and effects rapid shut down to protect power devices with any of these conditions occur. The Vi1120 intelligent system will evaluate fault conditions and once no longer present will return power to normal operations. The Vi1120 is designed to provide power for up to eight devices operating at 802.3af, four devices requiring 802.3at and two devices at power levels up to PoE +++.

Operating temperatures range from +0 C (32F) to +40C (104F) with the ability to cold start under full load at 25C (77F). The Vi1120 can be used with Vigtron's Vi2701 RX, Receiver and Tx Transmitter to provide extended data and 60W transmission for distances of up to 800 ft. (242m) and with Vigtron's Vi2804P four port extended distance network switch injector to provide 802.3at power for all four ports with no power sharing.



# Technical Specification

## Input

Voltage	Universal 100 ~240 V.A.C, single phase
Line Frequency	47~63 Hz
Current	1.6A Maximum
Inrush Current	80A Max./ 230 V.A.C.
Cold Start	25 degrees C @ full load
Average Efficiency	>= 87% @ 115VAC and 230VAC
Power Consumption	Pi <= 0.5W rated at 230VAC with no load
Power Factor	Pi >= 0.9 rated at full load

## Output

Voltage	+56VDC +/-5%
Current	2.15A
Regulation	53.2V minimal ~56V typical~58.8V Maximum
Ripple/Noise	300mV Maximum
Total Power	120 Watts
Output Plug Pin Assignment	Center Pin: Power Shield: Ground
Output Pin Wire	UL1185 AWG18

## Protection

Over Voltage Protection (OVP)	Voltage out = 105% ~150%
Over Current Protection (OCP)	Current out =105%~150%
Short Circuit Protection (SCP)	Automatic recovery after fault is removed

## Environmental

Temperature	Operating: 0 C (32F) ~+40C (104F) Storage: -20C (-4F) ~+80C (176F)
Humidity	Relative Operating: 20% ~ 80% RH Relative Storage:10%~90%
Cooling	Natural Air- No fan required

## Electrical

Power Method	Switching EMI conduction & Radiation
Harmonic Current EMS Immunity	EMC Directive 2004/108/EC (EN55022/EN55024)
MTBF	50,000 hours 2 25degrees C by MIL-HDBK-217F

## Mechanical

Dimensions	Case: 6.6x2.3x1.5 in., 168x65.9x39 mm. (LxWxH) Cable Length: 59 in., 1500 mm
Weight	1.3 lbs., 580g

## Regulatory

U.L./cUL UL	UL60950
NRCAN	Admendment 11 to the Energy Efficiency Regulations for External Power supplies, published on October 12, 2011 in the Canada Gazette, Part II.
CEC	Appliance Efficiency Regulations (Title 20, Sections 1601 through 1608) dated December 2010
US DoE	Office of Energy Efficiency and Renewable Energy 10 CFR Parts 430 and 431 (No. EERE-RM/TP, RIN No. 1904-AB53.
Australian and New Zealand	Minimum Energy Performance Standards (MEPS) Performance and Marking requirements for External Power supplies and AS/NZS4665-2005
EU Directive Energy	Related Products ErP 2009/125/EC and implementing Measure (IM) no. ED278/2009 for external power supplies. EC 278/2009 for external power supplies Level Verified V
FCC	FCC 47 CFR Part 15 Subpart B ICES-003 Issue 4 ANSI C63.4-2009
CE	EN 55022:2006+A1:2007 EN 61000-3-2:2006 EN61000-3-3:2008 En55024:1998+A1:2001+A2:2003

## Ordering Information

Part No.	Description
<b>Vi1120</b>	<b>High Power 120W 56V Power Supply</b>

## Drawing

