13100 Alondra Blvd., #106. Cerritos, California 90703
Tel: 562-677-1268, Fax: 562-677-1269
web site: http://www.enhanceusa.com

Open Frame (Mini-ITX AC/DC-ATX)

- Power The World with Highest Efficiency

ENO-1960

Features

- 60W Output, Active PFC
- Protections: OVP, OPP, SCP, OTP
- Reliability: MTBF 100,000 hrs @ 25°C, Full Load
- High Efficiency: 78% @ 115Vac, Full Load
- Safety Approval: Pending
- Warranty: 1-year manufacturer

CE FC RoHS COMPLIANT 2002/95/EC

Input Specification

Parameter	Conditions/Description	Min.	Normal	Max.	Units
Input Voltage Range	Universal Input	90	100-240	264	V(ac)
Input Frequency Range		47	60/50	63	Hz
Input Current	Measured at 115 Vac input, full load output			2.0	A
Inrush Current	Measured at 60A, 264Vac/63Hz (25°C ambient temperature, cold start).			60	A
Efficiency	Measured at 115 Vac or 230Vac , Full Load		78		%

Output Specification

		Voltage Regulation			Ripple Noise	Output Current (Amps)				
Parameter	Conditions/Description	Range	Min. (V)	Max. (V)	(mVp-p)	Min.	Normal	Max.	Peak	Units
+3.3VDC		+/-5%	3.1	3.5	50	0	-	3	4	
+5VDC		+/-5%	4.75	5.25	50	0	-	4	5	
+5VSB		+/-5%	4.75	5.25	50	0	-	1	1.5	
+12VDC		+/-5%	11.4	12.6	120	0	-	2	3	
-12VDC		+/-10%	-10.8	-13.2	200	0	-	0.1	-	
Hold-Up Time	Measured at 150Vac / 230Vac 90% load after power source removed.					12/16				mSec
Output Rise Time								10		mSec
Total Combined Output of +3.3V and +5V can not exceed 30W.										
Total Combined Output of +12V1 & +12V2 can not exceed 60.1W.										

Enviromental Specification

Parameter	Conditions/Description	Min.	Normal	Max.		Units
MTBF	Calculated via MIL-HDBK-217F @ 25°C ambient temperature , Full load, 115 Vac	100,000				Hours
Operating Temperature	Full load	0		40		°C
Storage Temperature		-40		70		°C
Relative Humidity	Operating/Storage Non-Condensing	10/10		70/95		%
Dimension	Length x Width x Height	165 x 45 x 32/6.5 x 1.8 x 1.3				mm / inch
ROHS	European Directive 2002/95/EC					

Reliability Protection

Parameter	Conditions/Description	Recovery Mode
Overload	Transit to current limit mode if output over 110% - 150%	Shut Down Output, Auto recover once reset AC power-on by user
Over Voltage		Shut Down Output, Auto recover once reset AC power-on by user
Short Circuit		Shut Down Output, Auto Recover once faults conditions removed
Over Temperature		Shut Down Output, Auto Recover once faults conditions removed

Safety & EMC Compliance

Category	Standard		Comment
SAFETY	cUL		Meet
EMI Conduction & Radiation			Compliance
Harmonic Current Emissions		EN61000-3-2	Compliance
EMS Immunity	Voltage Fluctuation	EN61000-3-3	Compliance
	Electrostatic Discharge (ESD)	EN61000-4-2	Compliance
	Radiated Susceptibilty	EN61000-4-3	Compliance
	Fast Transients / Burst - EFT	EN61000-4-4	Compliance
	Input Line Surge Immunity	EN61000-4-5	Compliance
	Conducted Susceptibilty	EN61000-4-6	Compliance
	Power Frequency Magnetic Field	EN61000-4-8	Compliance
	Voltage Dips	EN61000-4-11	Compliance

Industrial Panel PC

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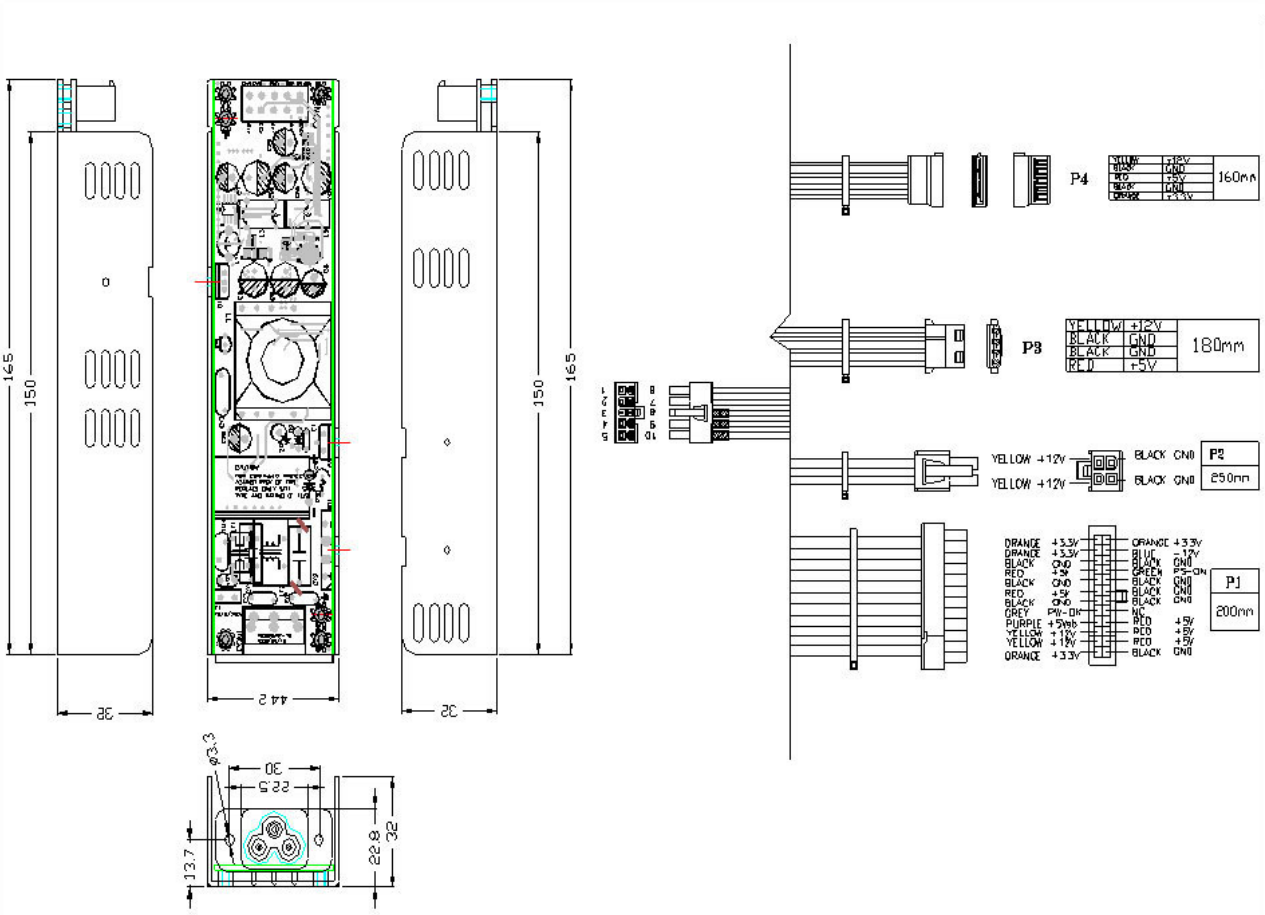

P1	Molex 39-01-2200 or equivalent
P2	Molex 39-01-2040 or equivalent
P3	Molex 8981-04P or equivalent
P7	Molex 88751 or equivalent SATA

Notes

1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheet are no longer controlled by Enhance Electronics, refer to http://www.enhanceusa.com for the most current product specifications.
2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured.
3. Mechanical drawings (model No. ENO-1960) is for reference only. The cable wire configuration may vary from other custom designed models as picture showing. Please contact your sales representative for detail.
4. Specifications are for reference only. All specifications are measured at an ambient temperature of 25°C, humidity 65%, 230Vac nominal input voltage and at rated output load unless otherwise specified.