

TOTAL POWER INT'L

DUAL SELECTABLE AC INPUT AC-DC 19" COMPATIBLE DOUBLE EUROCARD MULTIPLE OUTPUT 250-360 WATTS SWITCHING MODE POWER SUPPLIES HSU250, HSU300 & HSU360 SERIES



FEATURES:

- DUAL INPUT RANGE USER SELECTABLE
- DOUBLE OR TRIPLE CONVERTER ARCHITECTURE
- 19" COMPATIBLE EUROCARD FORMAT
- MEET THE SAFETY STANDARDS
- EMI MEET CISPR PUB. 22 & FCC CLASS A
- CE MARKING COMPLIANCE
- 6U X 12HP X 160MM DOUBLE EUROCARD VMEbus STANDARD

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: 115Vac/230Vac dual selectable.
Input Connector: DIN 41612 for HSU250/300/360T.
 IEC320 AC receptacle for HSU360.
Input Frequency: 47-63Hz
Inrush Current: Typ. 65A @230Vac.
Input Current: HSU250 6.0A@115Vac/3.0A@230Vac.
 HSU300 1.2A@115Vac/0.7A@230Vac.
 HSU360 6.5A@115Vac/3.5A@230Vac.
 HSU360T 6.2A@115Vac/3.0A@230Vac.
Dielectric Withstand: Meet IEC950.
EMI: Meet CISPR PUB. 22 & FCC Class A.
Power Fail/OK: Option.
Remote (Logic) Inhibit: Available.
Hold-up Time: Typ. 20mS.
Earth leakage: Typ. 0.3mA @230Vac.
Over Temperature Protection (OTP): Option.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Wattage: Typ. 250 Watts for HSU250.
 Typ. 300 Watts for HSU300.
 Typ. 360 Watts for HSU360/HSU360T.
Output Connector: DIN 41612 at rear.
Line Regulation: Typ. 0.4%.
Load Regulation: VO1 typ. ±1.0%(Main).
 VO2 typ. ±1.0%(Main).
 VO3 typ. ±1.0%(Main).
 or typ. ±3.0%(PR) for HSU360T.
Noise & Ripple: Typ. 1% peak to peak.
OVP: Built-in at main VO1/VO2/VO3 (Latch).
Adjustability: Available at main output VO1, VO2, VO3.
Remote Sense: Installed at main VO1.
Overload Protection (OLP): Fully protected against output overload and short circuit.
 Consult factory for OLP setting.

GENERAL SPECIFICATION

Efficiency: Typ. 75-80.0%.
Switching Frequency: Typ. 100K Hz.
Circuit Topology: Forward circuit.
 HSU250/HSU300/HSU360 triple converter.
 HSU360T dual converter architecture.
Transient Response: Typ. 3mS following a 25% load change.
Power Density: 1.58 Watts / Cubic Inch for HSU250.
 1.90 Watts / Cubic Inch for HSU300.
 2.28 Watts / Cubic Inch for HSU360 & HSU360T.
Operating Temperature: 0 to +50°C at full load. Derates linearly to +70°C at half load.
Storage Temperature: -20 to +85°C.
Temperature Coefficient: Typ. 0.04%/°C.
Cooling: At least 60cfm forced air flow is required for full load.
Construction format: 12HP(TE)x6Ux160mm 19" compatible double Eurocard VMEbus standard.
Safety Standard: IEC950/UL1950 Class I.

Note: All measurements are at nominal input, full load, and +25°C unless otherwise specified.

OUTPUT VOLTAGE/CURRENT RATINGS CHART

HSU250 Series

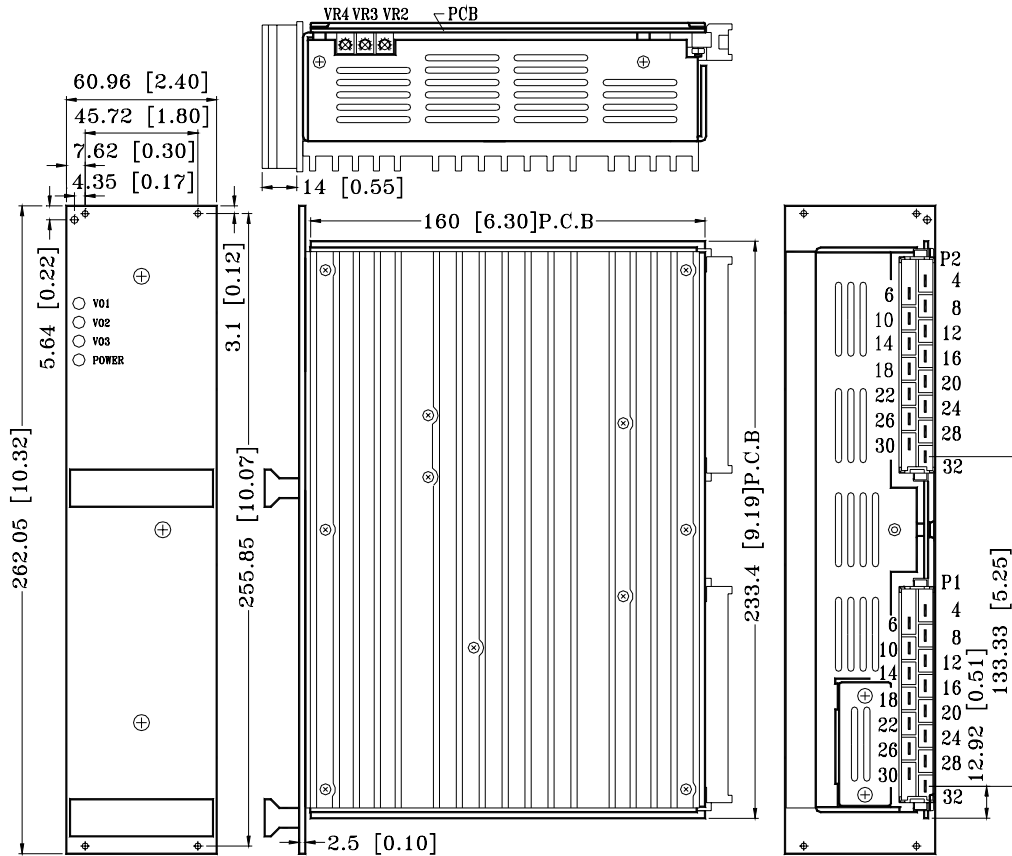
TRIPLE OUTPUT

MODEL NO.	MAIN VO1 ★@#			MAIN VO2 @★			MAIN VO3 @★		
	Typ.	Volt.	Max.	Typ.	Volt.	Max.	Typ.	Volt.	Max.
HSU250-T050II (HSU250-32)	25.0A	5.0V	30A	5.0A	12.0V	10A	5.0A	12.0V	10A
HSU250-T050KK	25.0A	5.0V	30A	4.0A	15.0V	8A	4.0A	15.0V	8A
HSU250-T050MI	25.0A	5.0V	30A	2.5A	24.0V	5A	5.0A	12.0V	10A
HSU250-T033II	35.0A	3.3V	40A	5.0A	12.0V	10A	5.0A	12.0V	10A
HSU250-T033EI	35.0A	3.3V	40A	12.0A	5.0V	20A	5.0A	12.0V	10A
HSU250-T050DI	25.0A	5.0V	30A	15.0A	3.3V	20A	5.0A	12.0V	10A

Symbol: "★" OVP built-in. "@#" Adjustable. "#" Remote sensing.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: HSU250 2.54kg (5.60 lb.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENTS

ASSIGNMENT	AC INPUT			TRIPLE OUTPUT					ASSORTED SIGNAL			
	AC-L	AC-N	AC-G	+VO1	+VO2	-VO3	DC COM	NC	S(+)	S(-)	SYS Reset	AC Fail
HSU250-T	P1-28	P1-30	P1-32	P2-4,6,8,10,12	P2-28,30	P2-16	P2-18,20,22,24,26	P1-8,10,12,24,16,18,20,22,24,26	P2-14	P2-32	P1-6	P1-4

Mating connector: DIN41612-H15 Female

OUTPUT VOLTAGE/CURRENT RATINGS CHART

HSU300 Series

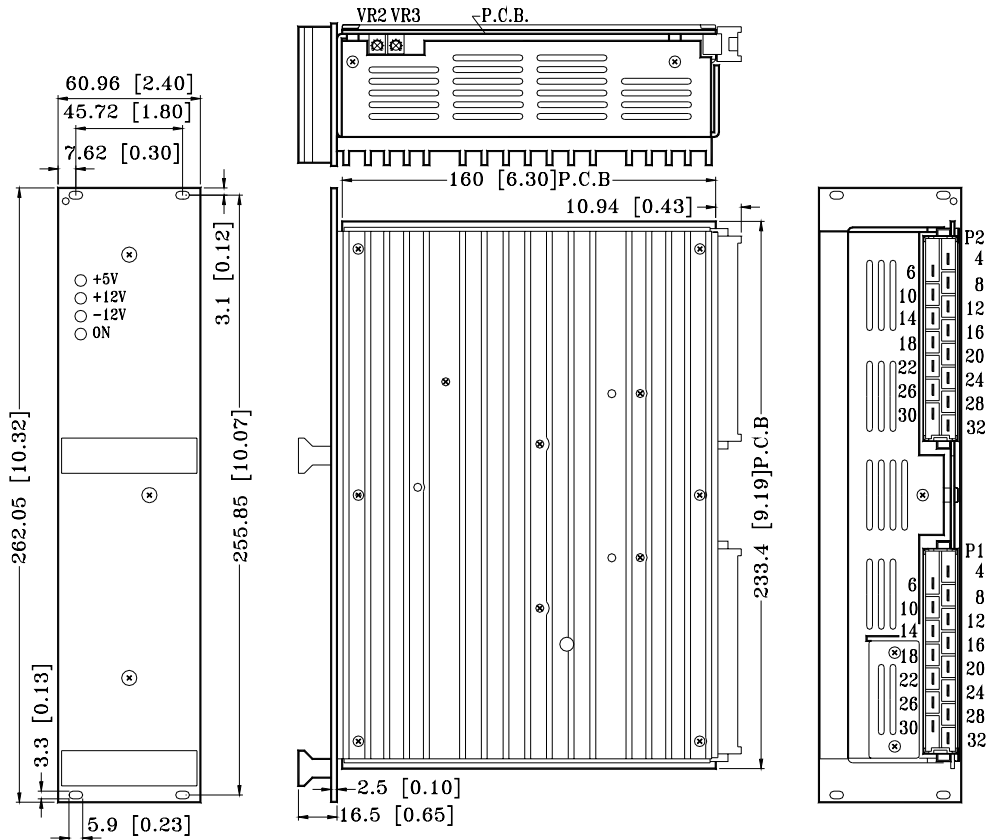
TRIPLE OUTPUT

MODEL NO.	MAIN VO1 ★@#			MAIN VO2 @★			MAIN VO3 @★		
	Typ.	Volt.	Max.	Typ.	Volt.	Max.	Typ.	Volt.	Max.
HSU300-T050II (HSU300-32)	36.0A	5.0V	40A	6.0A	12.0V	12A	6.0A	12.0V	12A
HSU300-T050KK	36.0A	5.0V	40A	5.0A	15.0V	10A	5.0A	15.0V	10A
HSU300-T050MI	36.0A	5.0V	40A	3.0A	24.0V	6A	6.0A	12.0V	12A
HSU300-T033II	50.0A	3.3V	55A	6.0A	12.0V	12A	6.0A	12.0V	12A
HSU300-T033EI	50.0A	3.3V	55A	15.0A	5.0V	--	6.0A	12.0V	12A
HSU300-T050DI	36.0A	5.0V	40A	18.0A	3.3V	--	6.0A	12.0V	12A

Symbol: "★" OVP built-in. "@" Adjustable. "#" Remote sensing.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: HSU300 2.75kg (6.06 lb.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENTS

ASSIGNMENT	AC INPUT			TRIPLE OUTPUT					ASSORTED SIGNAL			
	AC-L	AC-N	AC-G	+VO1	+VO2	-VO3	DC COM	NC	S(+)	S(-)	SYS Reset	AC Fail
HSU300-T	P1-28	P1-30	P1-32	P2-4,6,8,10,12	P2-28,30	P2-16	P2-18,20,22,24,26	P1-8,10,12,24,16,18,20,22,24,26	P2-14	P2-32	P1-6	P1-4

Mating connector: DIN41612-H15 Female

OUTPUT VOLTAGE/CURRENT RATINGS CHART

HSU360 Series

TRIPLE OUTPUT

MODEL NO.	MAIN VO1 ★@#			MAIN VO2 @★			MAIN VO3 @★		
	Typ.	Volt.	Max.	Typ.	Volt.	Max.	Typ.	Volt.	Max.
HSU360-T050H	42.0A	5.0V	45A	6.0A	12.0V	12A	6.0A	12.0V	12A
HSU360-T050KK	42.0A	5.0V	45A	5.0A	15.0V	10A	5.0A	15.0V	10A
HSU360-T050MI	42.0A	5.0V	45A	3.0A	24.0V	6A	6.0A	12.0V	12A
HSU360-T033H	55.0A	3.3V	60A	6.0A	12.0V	12A	6.0A	12.0V	12A
HSU360-T033EI	55.0A	3.3V	60A	15.0A	5.0V	--	6.0A	12.0V	12A
HSU360-T050DI	42.0A	5.0V	45A	18.0A	3.3V	--	6.0A	12.0V	12A

HSU360T Series

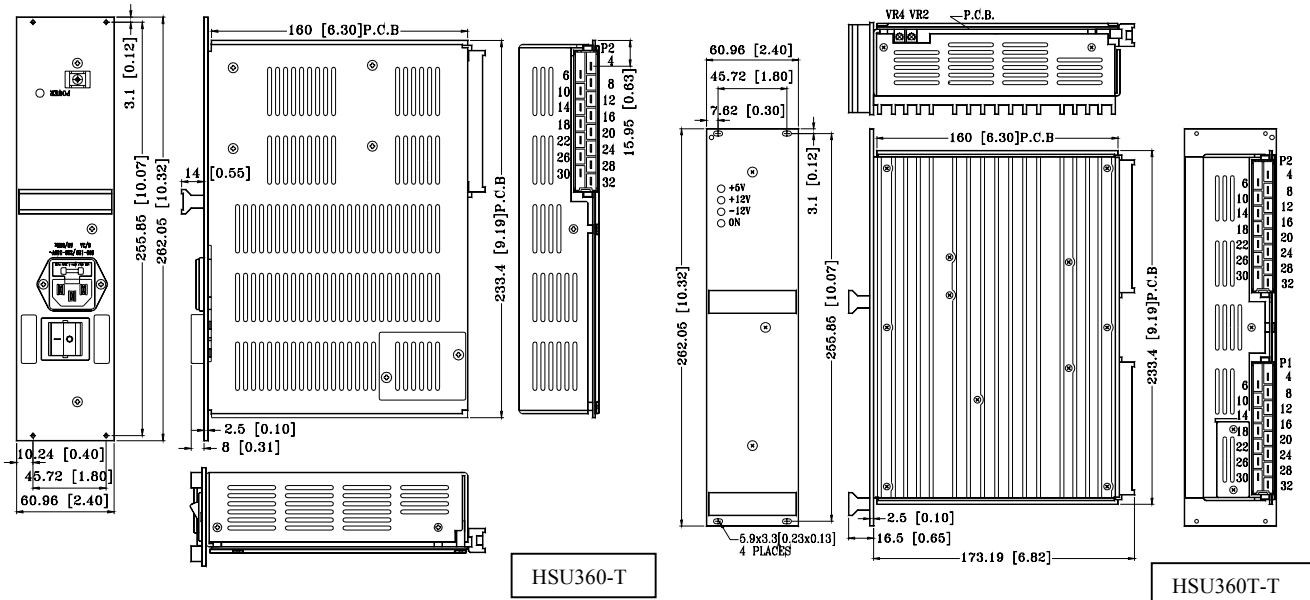
TRIPLE OUTPUT

MODEL NO.	MAIN VO1 ★@#			MAIN VO2 @★			MAIN VO3 ●		
	Typ.	Volt.	Max.	Typ.	Volt.	Max.	Typ.	Volt.	Max.
HSU360T-T050H (HSU360T-32)	60.0A	5.0V	70A	2.5 A	12.0V	3.5A	2.0A	12.0V	3.0A
HSU360T-T050KK	60.0A	5.0V	70A	2.0 A	15.0V	3.0A	2.0A	15.0V	3.0A
HSU360T-T050MI	60.0A	5.0V	70A	1.25 A	24.0V	2.5A	2.0A	12.0V	3.0A
HSU360T-T033H	65.0A	3.3V	75A	2.5 A	12.0V	3.5A	2.0A	12.0V	3.0A
HSU360T-T033EI	65.0A	3.3V	75A	6.0 A	5.0V	--	2.0A	12.0V	3.0A
HSU360T-T050DI	60.0A	5.0V	70A	8.0 A	3.3V	--	3.0A	12.0V	8.0A

Symbol: "★" OVP built-in. "@#" Adjustable. "#" Remote sensing. "●" Installed with Post Regulator.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: HSU360&T 2.80kg (6.17 lb.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENTS

ASSIGNMENT	AC INPUT			TRIPLE OUTPUT					ASSORTED SIGNAL			
	AC-L	AC-N	AC-G	+VO1	+VO2	-VO3	DC COM	NC	S(+)	S(-)	SYS Reset	AC Fail
HSU360-T	L	N	G	P2-4,6,8,10,12	P2-28,30	P2-14,16	P2-20,22 24,26,32	P2-18	P2-12	--	--	--
HSU360T-T	P1-28	P1-30	P1-32	P2-4,6,8,10,12	P2-28,30	P2-16	P2-18,20,22 24,26	P1-8,10,12,24,16 18,20,22,24,26	P2-14	P2-32	P1-6	P1-4

Mating connector: DIN41612-H15 Female