

## Ultra Slim Step Shape DIN Rail power supplies

HDR-15



HDR-30



HDR-60



HDR-100



### Reliable and Efficient Power Solutions for Various Applications

The MAXPRO HDR Power Supply Units (PSUs) are engineered for high-performance, offering reliable and efficient power conversion for industrial, commercial, and residential applications, ensuring high quality and dependable operation. Designed with versatility in mind, these units provide a stable and consistent power supply for a wide range of equipment.

### Key Features:

- **Compact and Rugged Design:** Space-saving form factor suitable for DIN rail mounting, ideal for industrial environments.
- **Wide Input Voltage Range:** Supports global input voltages for easy integration into various regions.
- **High Efficiency:** Designed to operate at peak efficiency, minimizing energy consumption and heat generation.
- **Built-In Protections:** Overload, overvoltage, and short-circuit protections ensure safety and reliability under varying conditions.
- **Low Profile, High Reliability:** Engineered for continuous 24/7 operation with long service life and minimal maintenance.
- **3 years warranty:** Backed by a 3-year warranty for peace of mind and long-term reliability.

### Applications:

- Industrial control systems
- Automation equipment
- Security systems
- Telecommunications
- LED lighting and more

	HDR-15-12	HDR-15-24	
<b>OUTPUT</b>	DC VOLTAGE	12V	24V
	RATED CURRENT	1.25A	0.63A
	CURRENT RANGE	0 ~ 1.25A	0 ~ 0.63A
	RATED POWER	15.0W	15.2W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	10.8 ~ 13.8V	21.6 ~ 29V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%
	LOAD REGULATION	±1.0%	±1.0%
	SETUP, RISE TIME at full load	2000ms, 80ms/230VAC	80ms/115VAC
HOLD UP TIME (Typ.)	30ms/230VAC	12ms/115VAC at full load	
<b>INPUT</b>	VOLTAGE RANGE	85 ~ 264VAC ( 277VAC operational ) 120 ~ 370VDC ( 390VDC operational )	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	85%	86%
	AC CURRENT (Typ.)	0.5A/115VAC	0.25A/230VAC
	INRUSH CURRENT (Typ.)	COLD START 25A/115VAC   45A/230VAC	
<b>PROTECTION</b>	OVERLOAD	110 ~ 145% rated output power  Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed  Constant current limiting within 50% ~100% rated output voltage, recovers automatically after fault condition is removed	
	OVER VOLTAGE	14.2 ~ 16.2V	30 ~ 36V
		Protection type : Shutdown o/p voltage, re-power on to recover	
<b>ENVIRONMENT</b>	WORKING TEMP.	-30 ~ +70°C	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C) RH non-condensing	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X,Y, Z axes; Mounting: Compliance to IEC60068-2-6	
	OPERATING ALTITUDE	2000 meters	
	OVERVOLTAGE CATEGORY	According to EN61558, EN50178, EN60664-1, EN62477-1; altitude up to 2000 meters	
<b>SAFETY</b>	WITHSTAND VOLTAGE	I/P-O/P:4kVAC	
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH	
<b>OTHERS</b>	MTBF	3724.3k hrs min. Telcordia SR-332(Bellcore); 1166.1k hrs min. MIL-HDBk-217F(25°C)	
	DIMENSION	17.5x90x54.5mm(W*H*D)	
	PACKING	74g;160pcs/12.9kg/1.09CUFT	

- NOTE**
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
  2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
  3. Tolerance: includes set up tolerance, line regulation and load regulation.
  4. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

	HDR-30-12	HDR-30-24	
<b>OUTPUT</b>	DC VOLTAGE	12V	24V
	RATED CURRENT	2.0A	1.5A
	CURRENT RANGE	0 ~ 2A	0 ~ 1.5A
	RATED POWER	24W	36W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	10.8 ~ 13.8V	21.6 ~ 29V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%
	LOAD REGULATION	±1.0%	±1.0%
	SETUP, RISE TIME at full load	500ms, 50ms/230VAC	500ms, 50ms/115VAC at full load
HOLD UP TIME (Typ.)	30ms/230VAC	12ms/115VAC at full load	
<b>INPUT</b>	VOLTAGE RANGE	85 ~ 264VAC(277VAC operational )	120 ~ 370VDC(390VDC operational )
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	88%	89%
	AC CURRENT (Typ.)	0.88A/115VAC	0.48A/230VAC
	INRUSH CURRENT (Typ.)	COLD START 25A/115VAC   45A/230VAC	
<b>PROTECTION</b>	OVERLOAD	105 ~ 160% rated output power Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50% ~100% rated output voltage, recovers automatically after fault condition is removed	
	OVER VOLTAGE	15 ~ 18V	30 ~ 36V
<b>ENVIRONMENT</b>	WORKING TEMP.	-30 ~ +70°C	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C) RH non-condensing	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X,Y, Z axes; Mounting: Compliance to IEC60068-2-6	
	OPERATING ALTITUDE	2000 meters	
	OVERVOLTAGE CATEGORY	; According to EN61558, EN50178,EN60664-1, EN62477-1; altitude up to 2000 meters	
<b>SAFETY</b>	WITHSTAND VOLTAGE	I/P-O/P:4kVAC	
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH	
<b>OTHERS</b>	MTBF	3670.4k hrs min.	Telcordia SR-332(Bellcore); 968.1k hrs min. MIL-HDBK-217F(25°C)
	DIMENSION	35x90x54.5mm(W*H*D)	
	PACKING	0.13kg;96pcs/14.2kg/1.04CUFT	

- NOTE**
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
  2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
  3. Tolerance: includes set up tolerance, line regulation and load regulation.
  4. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

	HDR-60-12	HDR-60-24	
<b>OUTPUT</b>	DC VOLTAGE	12V	24V
	RATED CURRENT	4.5A	2.5A
	CURRENT RANGE	0 ~ 4.5A	0 ~ 2.5A
	RATED POWER	54W	60W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	10.8 ~ 13.8V	21.6 ~ 29V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%
	LOAD REGULATION	±1.0%	±1.0%
	SETUP, RISE TIME at full load	500ms, 50ms/230VAC	500ms, 50ms/115VAC at full load
HOLD UP TIME (Typ.)	30ms/230VAC	12ms/115VAC at full load	
<b>INPUT</b>	VOLTAGE RANGE	85 ~ 264VAC(277VAC operational )	120 ~ 370VDC(390VDC operational )
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	88%	90%
	AC CURRENT (Typ.)	1.2A/115VAC	0.8A/230VAC
	INRUSH CURRENT (Typ.)	COLD START 30A/115VAC   60A/230VAC	
<b>PROTECTION</b>	OVERLOAD	105 ~ 160% rated output power Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50% ~100% rated output voltage, recovers automatically after fault condition is removed	
	OVER VOLTAGE	14.2 ~ 16.2V	30 ~ 36V
<b>ENVIRONMENT</b>	WORKING TEMP.	-30 ~ +70°C	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C) RH non-condensing	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X,Y, Z axes; Mounting: Compliance to IEC60068-2-6	
	OPERATING ALTITUDE	2000 meters	
	OVERVOLTAGE CATEGORY	; According to EN61558, EN50178,EN60664-1, EN62477-1; altitude up to 2000 meters	
<b>SAFETY</b>	WITHSTAND VOLTAGE	I/P-O/P:4kVAC	
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH	
<b>OTHERS</b>	MTBF	3524.8k hrs min.	Telcordia SR-332(Bellcore); 927.6k hrs min. MIL-HDBk-217F(25°C )
	DIMENSION	52.5x90x54.5mm(W*H*D)	
	PACKING	0.190kg;60pcs/13kg/0.91CUFT	

- NOTE**
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
  2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
  3. Tolerance : includes set up tolerance, line regulation and load regulation.
  4. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

	HDR-100-12	HDR-100-24	
<b>OUTPUT</b>	DC VOLTAGE	12V	24V
	RATED CURRENT	7.1A	3.83A
	CURRENT RANGE	0 ~ 7.1A	0 ~ 3.83A
	RATED POWER	85.2W	92W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 13V	24 ~ 25.5V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%
	LOAD REGULATION	±1.0%	±1.0%
	SETUP, RISE TIME at full load	500ms, 60ms/230VAC 500ms, 60ms/115VAC	
HOLD UP TIME (Typ.)	30ms/230VAC	12ms/115VAC at full load	
<b>INPUT</b>	VOLTAGE RANGE	85 ~ 264VAC(277VAC operational )	120 ~ 370VDC(390VDC operational )
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	88%	90%
	AC CURRENT (Typ.)	3A/115VAC	1.6A/230VAC
	INRUSH CURRENT (Typ.)	COLD START 35A/115VAC   70A/230VAC	
<b>PROTECTION</b>	OVERLOAD	102 ~ 110% rated output power Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50% ~100% rated output voltage, recovers automatically after fault condition is removed	
	OVER VOLTAGE	14.2 ~ 16.2V	30 ~ 36V
		Protection type : Shutdown o/p voltage, re-power on to recover	
<b>ENVIRONMENT</b>	WORKING TEMP.	-30 ~ +70°C	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C) RH non-condensing	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X,Y, Z axes; Mounting: Compliance to IEC60068-2-6	
	OPERATING ALTITUDE	2000 meters	
	OVERVOLTAGE CATEGORY	; According to EN61558, EN50178,EN60664-1, EN62477-1; altitude up to 2000 meters	
<b>SAFETY</b>	WITHSTAND VOLTAGE	I/P-O/P:4kVAC	
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH	
<b>OTHERS</b>	MTBF	3271.9k hrs min.	Telcordia SR-332(Bellcore); 856.5k hrs min. MIL-HDBk-217F(25°C)
	DIMENSION	70x90x54.5mm(W*H*D)	
	PACKING	0.27kg; 48pcs/13.74kg/0.96CUFT	

- NOTE**
- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
  - Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
  - Tolerance : includes set up tolerance, line regulation and load regulation.
  - Harmonic current test at 90% load for HDR-100-XXN.
  - The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).