

## 1000W 1U Front End Power Supplies

### Features

- ◆ 1U high
- ◆ Internal ORing Diodes
- ◆ Current Share

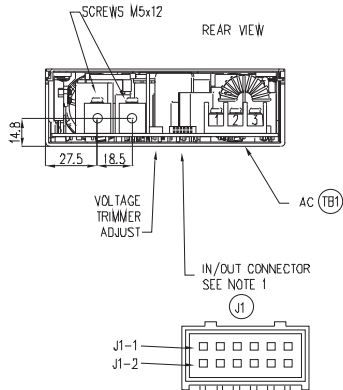
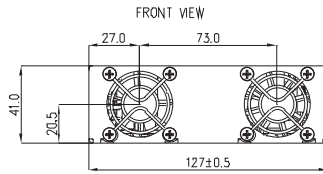


### Key Market Segments & Applications



Specifications		RFE1000-24-Y	RFE1000-32-Y	RFE1000-48-Y
Nominal Output Voltage	V	24V	32V	48V
Output Voltage Range	V	21.5 - 29V	28.8 - 38.4V	43 - 58V
Output Current	A	40A	31A	21A
Output Power	W	960W	992W	1008W
Line Regulation	mV	96mV	128mV	192mV
Load Regulation	mV	192mV	256mV	384mV
Output Noise	mV	200mV	250mV	300mV
Overvoltage Protection (Latching)	V	31 to 34V	41.5 to 45.5V	62 to 66V
Overcurrent Protection	%	105 - 125%, Non foldback type		
Overtemperature	-	Yes, automatic reset		
Series Operation	-	Up to 3 units may be connected in series		
Current share	-	Single wire current sharing, up to 8 units		
Remote Sense	-	Compensates for up to 1V on each load wire		
Signals (opto isolated)	-	DC OK, AC Fail, and Overtemperature warning, high on fail		
Remote On/Off	-	On: 0 - 0.6V or short, Off: 2- 15V or open		
Auxiliary Output	-	12V 0.25A bias voltage, (11.2 to 12.5V). Built in ORing diode		
AC Input Range	VAC,Hz	85 - 265VAC, 47 - 63Hz		
AC Input Current (100/200VAC)	A	12 / 6A		
Leakage Current	mA	<1.1mA at 230VAC input		
Inrush Current	A	<40A		
Hold up time (100VAC input)	ms	20ms typical		
Efficiency (typical) 100/200VAC	%	84 / 86%	84 / 86%	85 / 88%
Power factor Correction	-	EN61000-3-2 class A (20-100% load), >0.98 at full load		
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -11		
EMC (conducted and radiated)	-	EN55022, level B, FCC part 15J-B		
Operating Temperature	°C	0 to +70°C, derate 2%/°C from 50 to 60°C, 2.5%/°C from 60 to 70°C		
Storage Temperature	°C	-30 to +85°C		
Withstand Voltage	-	Input to Output 3kVAC, Input to Ground 2kVAC, Output to Ground 500VAC for 1 min.		
Isolation Resistance	-	>100M at 25°C & 70%RH, Output to Ground 500VDC		
Cooling	-	Two variable speed internal fans, airflow exits across input/output		
Humidity	-	Operating: 10 - 90% RH, Storage: 10 - 95% RH (non condensing)		
Shock & Vibration	-	Meets ETS 300 019		
Safety Agency	-	IEC/UL/CSA/EN62368-1, 60950-1, CE Mark		
Input / Output Connector	-	Input: Screw terminals, Output: M5x12 screws, Signals: Mating connector JST PHDR-12V5		
Output indicator	-	Green LED DC OK		
Size (L x W x H)	in(mm)	12 x 5 x 1.61" (305 x 127 x 41mm)		
Weight	g	2000		
Warranty	yrs	Two Years		

## Outline Drawing



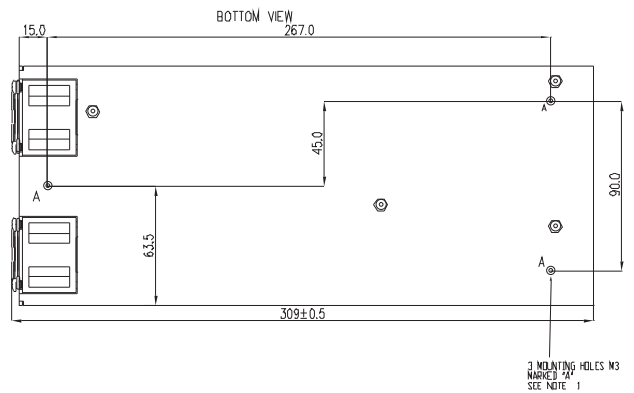
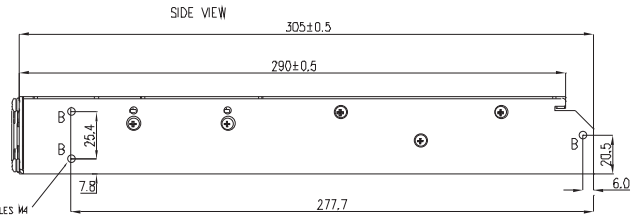
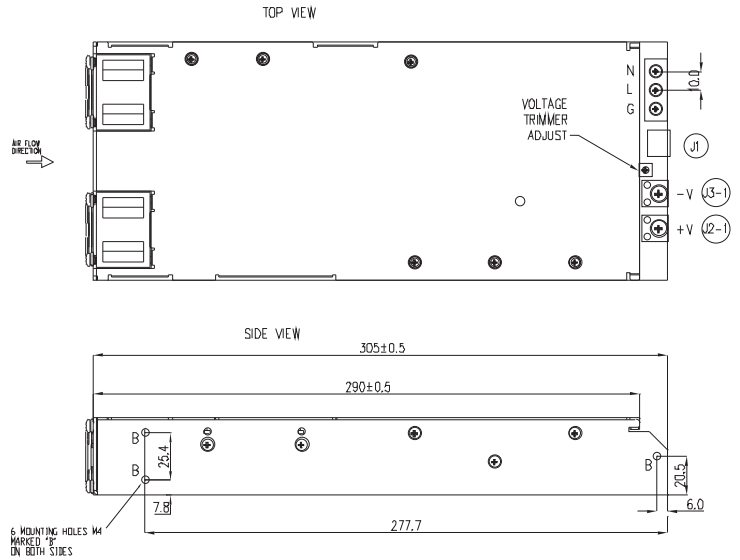
### NOTES

- CONNECTOR TYPE: S12B-PHDS (JST)  
FEMALE CONNECTOR TYPE: PHDR-12VS (JST)
- LED INDICATORS REFER TO INSTRUCTION MANUAL.
- MOUNTING SCREWS MUST NOT PENETRATE MORE THAN 3mm INTO THE UNIT.
- MODEL NAME, INPUT AND OUTPUT RATING AND SAFETY APPROVALS SYMBOLS ARE DESCRIBED ON TOP SURFACE LABEL.
- ALLOW MINIMUM 50 mm OF UNRESTRICTED AIR SPACE AT THE REAR OF UNIT. DO NOT OBSTRUCT AIR FLOW TO THE UNIT FRONT PANEL.
- IN OUT CONNECTOR BACK VIEW AND PINS ASSIGNMENT:

PIN.No.	FUNCTION
J1-3	+V
J1-10	-V
J1-6	DN/OFF
J1-1	+SENSE
J1-7	CURRENT SHARE
J1-9	CURRENT SHARE

PIN.No.	FUNCTION
J1-5	DC_OK
J1-11	SIGNAL_RTN
J1-12	AC_FAIL
J1-8	TEMP_ALARM
J1-2	-SENSE
J1-4	+12V_AUX

PIN.No.	FUNCTION
TB1-1	AC GROUND
TB1-2	AC LINE
TB1-3	AC NEUTRAL



## Other Related Products

FPS1000	1U Hotswap 1000W Rack mount
HWS	15 - 1800W Power Supplies
SWS-L	600 - 1000W Power supplies

For additional information, please visit  
<https://product.tdk.com/en/power/>

