



प्रसारभारती / PRASAR BHARATI
भारतीयलोकसेवाप्रसारक/ INDIA'S PUBLIC SERVICE BROADCASTER
अपरमहानिदेशक(अभि.) (द.क्षे) काकार्यालय/ O/o. ADDL. DIRECTOR GENERAL (E)(SZ)
आकाशवाणीएवंदूरदर्शन / ALL INDIA RADIO & DOORDARSHAN
स्वामीशिवानंदासालै, चेन्नई / SWAMY SIVANANDA SALAI, CHENNAI - 600 005

No. ADG(E)(SZ)/SMT/IEBR/METP/24-25/

Date: 15.10.2024

Sir/Madam,

SUB: Request for Budgetary Quotation for 2 nos AC-DC Switching Power supply(BPEU3007) for 10KW DBE FM Transmitter PA.

Quotations are invited for supply of 2 nos. AC-DC Switching Power supply (BPEU3007) for 10KW DBE FM Transmitter PA for Akashvani Hospet

Sl. No.	Particulars	Qty.
1.	Supply of 2 nos. AC-DC Switching Power supply (BPEU3007) for 10KW DBE FM Transmitter PA for Akashvani Hospet as per the specification attached.	1 job

- 1) **GUARANTEE / WARRANTEE:**
One years from the date of supply of material.
- 2) **Payment terms** :100% payment on testing of item.

Quotations may be Addressed to : Shri. N.Ravichandran, Deputy Director(E), Room No 306, O/o Additional Director General(E), AIR & DD, Swamy Sivananda Salai, Chennai - 600005.
And by Email to : diravm_sz@yahoo.com

Yours faithfully

N.Ravichandran
Deputy Director(E)

TECHNICAL SPECIFICATION - BPEU3007 (Power Supply) for 10KW DBE FM Transmitter

GENERAL FEATURES	
AC/DC Converter 3000W Multi -Output	
Active Power Factor Correction	
High Efficiency	
Universal Input Voltage	Single-Phase 220 / 240VAC
Main Outputs	20÷ 50V/60A
Aux. Output	48V/2.5A, 24V/1.2A
Current & Voltage Monitors	
Remote Enable / Disable	
Baseplate / Air Cooling	

ELECTRICAL SPECIFICATIONS	
INPUT	
Voltage	177÷ 264VAC Single-Phase
Current	≤20A @full-load @ 177VAC Single-Phase
Frequency	47...63Hz
Efficiency	≥ 93%@2600W load (45V 58A) @230VAC
Power Factor	> 0,95@full load @ 230VAC
Inrush current	≤ 30Apk @ 230VAC

OUTPUTS						
OUTPUT	VOLTAGE (VDC)	I nom. (A)	I pk.	TOLERANCE (%)	RIPPLE (%)	POWER nom. (W)
V1	+20 ÷ 50*	+30 @ 50V**	33	≤ 2	< 3	1500
V2	+20 ÷ 50*	+30 @ 50V**	33	≤ 2	< 3	1500
V3***	+48	2,5	3.0	≤ 5	≤ 5	120
V4***	+24	1,2	1,4	≤ 5	≤ 5	30
*V1, V2 adjustable by multi-turns trimmer set o board or by remote 0÷5Vexternal signal (see procedure below- JP1).						
**I max total V1 -V2=60A @ 50V /62A @ 49V/65A @45V.						
*** Internal OR diode in series on positive pole.						

PROTECTIONS	
Over-Load	Constant-Current
Short-Circuit	Hicc-up mode (auto recovery)
Over-Voltage (V1, V2)	Set point =58V ± 5%, not automatic return to operation
Over -temperature	Set Point =70°C @baseplate, 100°Ctransformer, Automatic return to operation with hysteresis
General:	Provide external fuses or equivalent protection on AC main

ALARM/SIGNALS/ CONTROLS	
Output V1, V2 current monitor	Linear analogic signal 100mV→1A; 5mA max. supply current
Output V1, V2 voltage monitor	Linear analogic signal 100mV→1V; 5mA max. supply current
Over Temperature Alarm	Open collector, 4mA max. sink current; Alarm =Low (power supply V1 still ON)
Over Temperature Protection	Open collector, 4mA max. sink current; Alarm =Low (power supply V1 OFF)
Power Fail-main under -voltage	Open collector, 4mA max. sink current; Alarm =Low (power supply V1 OFF)
Remote Enable output V1, V2	Connected to COM=Power-On, floating = Off (sink 5 mAmps min.)
Remote Enable output V3	Connected to COM=Power-On, floating = Off (sink 5 mAmps min.)

THERMAL CHARACTERISTICS	
Operating Temperature	-10 ÷ +45°C (see Thermal Protections)
Storage Temperature	-20 ÷ + 85°C

STANDARDS /REGULATIONS		
Safety	EN60950-1	
EMI/EMC	EN55022	Conducted Noise (Industrial level)
	EN61000-4-4	Fast- Transients
	EN61000-4-5	Surges ($\pm 2\text{Kv}$ common $\pm 1\text{Kv}$ differential)
	EN61000-4-11	Voltage -Dips
	EN61000-3-2	Harmonics Current
CE Mark		

CONNECTIONS /SCHEME	
INPUT	N°3 Fast -on male connectors (6,35 x,8mm) L, N, PE
OUTPUT	V1, V2: 4 pole screw type terminal block (2poles for Positive and 2 poles for Negative)
	V3, V4: 4 pole pluggable screw type terminal block
SIGNALS/CONTROLS	Male AMP MODUII type 10 pole dual in line connector

CONNECTIONS / SCHEME			
1	COM	2	COM
3	IM2	4	ENABLE V1
5	VPROG	6	IM1
7	OTP	8	OTA
9	PWR FAIL	10	VM