



**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT
PERCENTAGE RATE N. I. T.**

N.I.T. No.	:	01/EE&SM(E)/TP-I/2023-24
Name of Work	:	Construction of Permanent Campus for Indian Institute of Technology Tirupati, at Merlapaka village, Yerpedu Mandal, Chittoor Dist., A.P. Phase-1 (Stage-1C). Sub Head:-DSITC (Design, Supply, Installation, Testing and Commissioning) of On Grid Rooftop Photovoltaic Solar Power Generation of capacity 780 KWp for on the Roof top of IIT Tirupati Academic Buildings (DB-1,DB-2 & CIF)
Estimated cost	:	Rs.5,17,98,180.00
Earnest Money	:	Rs.10,35,964 /-
Performance Guarantee	:	5% of bid value
Security Deposit	:	2.5% of bid value
Time Allowed	:	05 (Five) Months

Certified that this composite NIT contains 01 to 75 pages only.

**Assistant Engineer (E)
TPESD-II, CPWD, Tirupati**

**Executive Engineer & SM(E)
TP-I, CPWD, Tirupati**

This NIT for Composite work amounting to Rs.5,17,98,180.00 (Rupees Five Crore Seventeen Lakhs Ninety-Eight Thousand One Hundred and Eighty only) is hereby approved.

APPROVED

**Chief Engineer cum ED
TPZ, CPWD, Tirupati.**

MATERIAL AND EQUIPMENT - PREFERRED MAKES

All materials and equipment shall conform to the relevant standards and shall be one of the preferred makes indicated below.

S. No.	Details of Materials /Equipment	Manufacturer's Name
1.	SPV Modules	HHV Panasonic EMVEE RENEWSYS NOVASYS WAREE REC CANADIAN SOLAR TATA BHEL BEL
2.	Power Conditioning Unit (PCU)	SMA(America) KACO(Siemens) Ingeteam Delta Siemens ABB Canadian Solar Solis Hitachi Thea Goodwe
3.	Junction Box	Hensel Spelsberg ABB Cooper busman
4.	LT Jointing kit	Rachem Mahindra M-Seal 3M
5.	Cable glands	Dowells Comet Jainson
6.	Bi-Metallic Cable lugs	Dowells Comet Jainson
7.	ACDB panel	Havells Geesys L & T Siemens Legrand Schneider

8.	Energy meter – Electronic Digital Meter (Networking type)	L&T Siemens Schneider Secure HPL
9.	PV module interconnecting connector	Tyco Cooper busman MC
10.	DC Cables and wires	Havells KEI LAPP Siechem
11.	PVC Conduits and accessories (ISI marked)	Avon Plast Precision AKG BEC GM Clipsal Polycab
12.	GI Pipes (ISI marked)	TATA JINDAL (HISSAR) ZENITH Surya
13.	DWC- HDPE underground pipes for Cables	Gemini Tirupati Sudhakar Supreme Prince Duraline Crown Astral
14.	Lightning arrestor	Indelec Star Erico
15.	Indicating Lamps, LED type, Push Button	Schneider Electric (MG) Larsen & Toubro (ESBEE) Siemens Vaishno
16.	PVC insulated XLPE Aluminum/ copper conductor armoured MV Cables up to 1100V grade (IS:7098)	Havells KEI Finolex Anchor RR Kabel L&T Asmon
17.	Selector Switch, Toggle switch	Salzer (Larsen & Toubro) Siemens

		Kaycee
18.	Timer	Siemens L&T Schneider Electric – TE GE
19.	Fire Sealant	Promat Hilti Birla – 3 M
20.	Cat-6A LAN cable	Panduit Schneider Systimax(COMMSCOPE) Molex Legrand Extreme
21.	Surge Protection	OBO Betterman ABB Legrand
CIVIL ITEMS		
22.	Cement (PPC)	ACC Ultra tech Birla Ambuja
23.	Tmt steel bars (crs) fe 500d/ fe 550d & structural steel	SAIL, TATA, RINL, JSW
24.	Epoxy Enamel Paint And Acrylic Smooth Exterior Paint	Dulex Nerolac Berger Nippon
25.	All other items not covered above	As per approval of the Engineer-in-charge.

1. For items for which makes of materials are not specified, the same shall be decided by the Engineer – in – charge and the decision taken by the Engineer – in – charge shall be final and binding on the contractor.

2. The Government has issued public procurement policy (preference to Make in India) vide Ministry of Commerce and Industry Development of industrial and promotion (PPS) vide order No. P-45021/2/2017-PP BE-II dated: 28-05-2018, to “Encourage Make in India” and to promote manufacturing and production of Goods and services in India with a view to enhancing income & employment. CPWD has decided to implement this policy.

3. The agency shall submit list of makes of materials proposed to be used on the work from local suppliers (as defined in the above order dated:28-05-2018) along with minimum local content as specified below for approval of the department out of the approved makes kept in the tender.