

Tender for '**Supply, Installation, Testing & Commissioning of Networking with Optical Fiber Cables (OFC) including Closed Circuit Television (CCTV) Camera Works at Phase 1C & 1B Area in Origins, Chennai** for Mahindra Industrial Park Chennai Limited near Gummidipoondi located in Pudevoyal village, Gummidipoondi Taluk & Eliambedu village, Ponneri Taluk of Tiruvallur District

**Volume - III**  
**Tender schedule (Bill of Quantity)**

**Mahindra** INDUSTRIAL PARK CHENNAI LTD.,  
**Mahindra Industrial Park Chennai Limited,**  
Mahindra Towers, Ground Floor, No. 17 / 18,  
Pattullous Road, Anna Salai, Chennai - 600 002

**Volume – III**  
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**1. Preamble to bill of quantity**

**(This clause to be read in conjunction with clause 4.20 of General Conditions of Contract)**

**Material:**

Material received at site shall be stacked by the Contractor in weather tight sheds constructed on work site away from walls and on a damp proof floor. Consignments shall be used in the order in which they are received. Adequate arrangements shall be made for keeping the shed dry during the wet weather by all means or as directed by the engineer

All other materials shall be stacked in secured godown preferably weather tight. Floor shall be firm and stacking shall be in most planned manner to avoid damage, contamination, warping, obstruction etc. It shall allow 1<sup>st</sup> come 1<sup>st</sup> used facility.

All godowns shall be lockable and under strict control of the Contractor's representative. The developer or his representative shall have access at any time to all stores, godown etc. His guidance and instruction in up keeping shall be followed.

**Important note:**

- a) The rates quoted by the bidder should be inclusive of all taxes
- b) Anyhow, the bidder shall also mention separately about the details of taxes considered in their offer in the letter accompanying the financial bid.

**Volume III - Tender schedule (Bill of Quantity)**

**2. Summary of estimate**

Sl. No.	Item Description	Quoted amount (Rs.)
1.	Supply of Fibre Network and Accessories	
2.	Erection, Testing & Commissioning of Fiber Network and Accessories	
3.	Supply, Erection, Testing and Commissioning of CCTV Camera and allied works	
	<b>Net Amount (Rs.)</b>	
	<b>Add: GST @ _____ %</b>	
	<b>Gross Amount (Rs.)</b>	
	<b>Gross Amount in Words</b>	

**3. Cost abstract**

Sl. No	Description	UOM	Quantity	Rate is Rs. (Excluding GST)	Amount is Rs. (Excluding GST)
<b>A) Supply of fiber network and accessories of the following</b>					
1	Supply of 6-Core Outdoor Single Mode Fiber Cable of an approved make, as recommended and approved by the Engineer In-Charge ( <b>Make :D-Link/Technoflex/ Finolex/ Dronage</b> )	Mtrs	4480		
2	Supply of 24-Core Outdoor Single Mode Fiber Cable of an approved make, as recommended and approved by the Engineer In-Charge( <b>Make: D-Link/Technoflex/ Finolex/ Dronage</b> )	Mtrs	1950		
3	Supply of 24 Port Unloaded LIU Box Only of an approved make, as recommended and approved by the Engineer In-Charge( <b>Make: D-link/Honeywell/Siemens/JCI Hikvision/Prama/CP Plus/One Touch/ Godrej/ Dahua</b> )	Nos	15		
4	Supply of Empty Adapter Panel for LIU of an approved make, as recommended and approved by the Engineer In-Charge( <b>Make: D-Link/Honeywell/Siemens/JCI/Hikvision/Prama /CP Plus/Dahua</b> )	Nos	12		
5	Supply of Adapter Panel for LIU of an approved make, as recommended and approved by the Engineer In-Charge( <b>Make: D-Link/Honeywell/Siemens/JCI/CP Plus/Dahua</b> )	Nos	30		
6	Supply of SC Duplex Adapter/Coupler-Single Mode of an approved make, as recommended and approved by the Engineer In-Charge( <b>Make: D-Link/Technoflex/Finolex/Dronage</b> )	Nos	90		
7	Supply of 1 Mtr SC Pigtails-Single Mode of an approved make, as recommended and approved by the Engineer In-Charge. ( <b>Make :D-Link/Technoflex/Finolex/Dronage</b> )	Nos	220		
8	Supply of 3 Mtrs SC to LC Fiber Patch Cord-Single Mode of an approved make, as recommended and approved by the Engineer In-Charge. ( <b>Make :D-Link/Technoflex/Finolex/Dronage</b> )	Nos	22		
9	Supply of 3 Mtrs SC to SC Fiber Patch Cord-Single Mode of an approved make, as recommended and approved by the Engineer In-Charge. ( <b>Make :D-Link/Technoflex/Finolex/Dronage</b> )	Nos	20		

Sl. No	Description	UOM	Quantity	Rate is Rs. (Excluding GST)	Amount is Rs. (Excluding GST)
10	Supply of Cat6 RJ45 Jack of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make D-link/Technoflex/Finolex/Dronage)</b>	Nos	100		
11	Supply of Outdoor Cat6 UTP 4-Pair Armoured Cable Box of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make : D-Link/Technoflex/Finolex/Dronage)</b>	Box	4		
12	Supply of 22U 600x650mm Outdoor Rack with 3 Feet Stand Accessories: Self tray- 2nos, Air Cooling Fans- 4nos, 6/16Amps 6 Socket PDU-1nos and Hardware Pocket - 1nos of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make: Reputed /Customized)</b>	Nos	8		
13	Supply of 42U - Network Rack Accessories: Self tray - 2nos, Air Cooling Fans- 4nos, 6/16Amps 6 Socket PDU-1nos, Vertical Cable manager- 2nos and Hardware Pocket- 2nos of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make : Netrack/Rittal/Schneider)</b>	Nos	1		
14	Supply of GS724TP Netgear 8-Port Gigabit Ethernet High-Power PoE+ Smart Switch with 2 Dedicated SFP Ports (192W)of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make : Netgear/Equivalent)</b>	Nos	10		
15	Supply of 1Gig SFP-Single Mode of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make : D-link/Cisco /Equivalent)</b>	Nos	22		
16	Supply C1200-24T-4G Fiber Switch of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make: Cisco/Equivalent)</b>	Nos	1		
17	Supply SFP-10G SFP of an approved make, as recommended and approved by the Engineer In-Charge.	Nos	10		
18	Supply of Numeric HP Max 1 KVA (1ph-1ph) Online UPS System with SNMP card of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make: ABB/Emerson network/Eaton/GE POWER/Mitsubishi)</b>	Nos	9		

Sl. No	Description	UOM	Quantity	Rate is Rs. (Excluding GST)	Amount is Rs. (Excluding GST)
19	Supply of SMF Exide (Each rack 3nos) of 42AH Battery of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make: EXIDE/AMCO/Amar Raja)</b>	Nos	24		
20	Supply of 10 Inch Metal Tag- Fully Adjustable of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make: Reputed)</b>	Nos	50		
21	Supply of Cable Tie Packet & Additional Accessories of an approved make, as recommended and approved by the Engineer In-Charge. <b>(Make: Reputed)</b>	Lot	1		
<b>Total amount – A</b>					
<b>B) Erection, testing and commissioning of the following</b>					
1	Supply and laying of 32 mm dia HDPE Pipes including laying of 6 core and 24 core single mode Outdoor Fiber Cable including necessary clamps, screws, installation tap role, silicone sealant and applicator cum as per site conditions. <b>(Make: Gebrit/Velsir/Huliot). (scope should include of road crossing, drain crossing, removal and relaying of paviour areas, providing GI pipes in the drain crossing areas etc as per site conditions)</b>	Mtrs	6500		
2	Splicing Charges for OFC Core as recommended & approved by Engineer-in charge	Nos	260		
3	Fixing of Outdoor 21U Rack as recommended and approved by Engineer-in charge	Nos	8		
4	Fixing of 42U Networking Rack as recommended and approved by Engineer-in charge	Nos	1		
5	Laying of Cat6 4-Pair Armoured Cable with HDPE Pipe as recommended and approved by Engineer-in charge	Mtrs	900		
6	Providing Crimping arrangement of RJ45 Jack as recommended and approved by Engineer-in charge	Lumpsum	1		
7	Civil Works for construction and fixing of racks, UPS ,Support structures etc as per site conditions (scope should include supply of civil materials) Construct	Lumpsum	1		

Sl. No	Description	UOM	Quantity	Rate is Rs. (Excluding GST)	Amount is Rs. (Excluding GST)
8	<b>Removal and alteration of existing Rack setup:</b> Rack, Network Cable & OFC Cable Removing, LIU Removing, Jack panel Removing, Fiber & Network Switch removing, CCTV NVR removing, LIU fixing and Splicing, Fiber Switch & Network Switch fixing, Jack Panel fixing with cable installation. CCTV configuration, Rack Dressing with new Tray for CCTV, CCTV cable laying for excises camera - (210 mtr)	Lumpsum	1		
9	Supply, installation, Testing and commissioning of earth pit as per IS 3043 including all civil works and connectivity between earth pit & equipment <b>(Make: Jef Techno/Elapp/True Power/Graving/Universal)</b>	Nos	9		
10	Excavation of soft soil & hard soil and providing concrete in all the outdoor racks, drain crossings, removal and relaying of pavours etc as per site conditions including transportations	Lumpsum	1		
<b>Total Amount - B</b>					
<b>C) Supply, Erection, Testing and Commissioning of CCTV Camara and allied works</b>					
1	Supply, installation, testing, commissioning of 8MP(3840x2160 Pixel) IP Bullet camera Optical Zoom:12X-16X,Field of View (Degree):more than 90-105, Focal length:3.3 mm – 10.2 mm suitable for outdoor application, Smart Analytics, IR illumination Range(meter): 40M, Supported Protocols: HTTP, HTTPS, DNS, DDNS, TCP/IP, IPv4, IPv6, IEEE 802.1 all-inclusive necessary supports for installation completion as per the recommended and approved by the engineer in-charge. Model DS-2CD3086G2-IS /Equivalent. <b>(Make-HIK vision/Honeywell/Siemens/HIK vision/Prama/CP Plus/One touch/Godrej/Dahua)</b>	Nos	19		
2	Supply, installation, testing, commissioning of approved make 32 Channel Network Video Recorder (NVR), Digital Sentry Network Video storage server including all accessories as required for satisfactory completion as per the recommended and approved by the engineer in-charge. <b>(Make Honeywell/Siemens/HIK vision/Prama/CP Plus/One touch/ Godrej/ Dahua)</b>	Nos	1		

Sl. No	Description	UOM	Quantity	Rate is Rs. (Excluding GST)	Amount is Rs. (Excluding GST)
3	Supply, Installation, Testing and Commissioning of approved make 8TB HDD as per the recommended and approved by the engineer in-charge ( <b>Make - Seagate/WD</b> )	Nos	5		
4	Supply and Installation of Housing Unit with 1 Feet Stand as recommended and approved by the Engineer In-charge ( <b>Make : STD-Heavy</b> )	Nos	18		
5	Welding Work and RAD with Accessories as recommended and Approved by Engineer-In Charge	Nos	18		
6	providing Additional View @ MWC Admin Office, Chengalpet - Supply of 32ch Normal NVR without HDD - Model : DS-7632NI-M2 ( <b>HIK-Vision/Honeywell/Dahua/Prama</b> )	Nos	1		
7	Termination Charges for Project Model IP Cameras as recommended and approved by Engineer in Charge.	Nos	18		
8	Testing and Termination Charges for Project Model 32ch NVR as recommended and approved by Engineer In-charge.	Nos	2		
<b>Total Amount - C</b>					
<b>Net Amount (Rs.) A+B+C (Excluding GST)</b>					
<b>Add: GST @ ____%</b>					
<b>Gross Amount (Rs.)</b>					