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GOVT. OF ASSAM

**OFFICE OF THE PRINCIPAL, HRH THE PRINCE OF WALES INSTITUTE OF
ENGINEERING & TECHNOLOGY, JORHAT**

Ref: No. POW/NEQIP/2016/ 1716-I

Date: 27-07-2016

**Tender Document for Designing, Supply, Installation & Commissioning of
Local Area Network at HRH POWIET, Jorhat**

Tender Notice No. POW/NEQIP/2016/ 1716-I, Date: 27-07-2016

LAST DATE & TIME FOR RECEIPT OF TENDER : 16/09/2016(14.00 HRS)

DATE & TIME OF OPENING : 17/09/2016(14.30 HRS)

**NAME AND ADDRESS OF THE TENDERER : Principal,
HRH The Prince of Wales Institute
of Engg. & Tech., Jorhat, Assam**

FAX : 0376-2320074

TENDER PURCHASE DETAILS:

Tender Documents can be obtained by downloading from <http://www.powietjrt.org> the cost of tender document amounting to **Rs. 500/- only** (Non-Refundable) should be submitted by means of demand draft only along with the tender document.

The demand draft must be in favour of the Principal, HRH The Prince of Wales Institute of Engineering and Technology, Jorhat, Assam, and payable at Jorhat

Demand Draft No. _____ Dated _____.

EARNEST MONEY DETAILS (EMD): Rs. 20,000/- (Refundable)

The Demand Draft pertaining to Earnest Money should be submitted along with the Tender Document. The demand draft must be in favour of the Principal, HRH The Prince of Wales Institute of Engineering and Technology, Jorhat, Assam, and payable at Jorhat

Demand Draft No. _____ Dated _____.

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SECTION I

INVITATION FOR BIDS

1. H.R.H. The Prince of Wales Institute of Engineering and Technology, Jorhat Assam invites sealed bids from eligible bidders for, Supply, Installation & Commissioning of Local Area Network at POWIET, Jorhat
2. Interested and eligible Bidders may obtain further information, if required, from the office of The Principal , POWIET, Jorhat
3. The bidding document may be obtained by downloading it from <http://www.powietirt.org>
4. The technical bid along with bidder's information should be submitted in the tabular form as per **Section – VII Deviation shall be submitted as enclosures point wise.**
5. The price bid should be submitted in the tabular form as per **Section – VIII.**
6. Bids will be opened in the presence of Bidder's representatives who choose to attend on the specified date and time.
7. In the event of the date specified for bid receipt and opening being declared as a Holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.

The details of the tender are as under:

Sl. No.	Items	Description
1	Scope of Work	Supply, Installation & Commissioning of Local Area Network with Wi-fi
b.	Cost of tender document	500/- (non-refundable)
c.	Last date& time of submission of bid	16/09/2016(14.00 HRS)
d.	Date& time of opening of technical bid	17/09/2016(14.30 HRS)
E	Date & time of opening of commercial bid	To be Notified after completion of technical bid evaluation .
F	EMD	Rs. 20,000/-
G	Place of opening of bids	POWIET, Jorhat
H	Address for communication	Principal, HRH The Prince of Wales Institute of Engineering and Technology, Jorhat, Assam

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Name and Signature of the Authorized signatory.

SECTION II

INSTRUCTIONS TO BIDDERS

1. The Bidders shall give detailed tender in their own forms in two Bids in separate duly sealed envelopes. The envelopes shall bear the following inscriptions:

“Part - I Technical Bid-Tender for Supply, Installation & Commissioning of Local Area Network at POWIET, Jorhat

“Part - II Financial Bid- Tender for Supply, Installation & Commissioning of Local Area Network at POWIET, Jorhat

After placing both envelopes inside another envelop, the bid envelop shall be super scribed with Tender Subject, Tender notice No. and Due Date otherwise the bid will be rejected.

2. Bids shall be valid for a minimum period of 120 days after the due date.
3. Maximum Project duration from the date of issue of work order must be within 2 months
4. The Bids must reach the undersigned on or before the due date, i.e. Bids received after the due date and time is liable to be rejected. Institute will not be responsible for any postal delays. However, in the event of due date being a holiday or declared Holiday for POWIET, the due date for submission of the bids will be the following working day at the appointed time & venue.
5. Bids submitted by FAX/EMAILS will not be considered at all. Such tenders will be rejected without any notice to the bidder.
6. Bids (Technical Bids) received will be opened on the same day. Parties participating in the bid are requested to be available for opening of bids.
7. The Institute will preferably deal only with Companies/Firms who have their service centre/support infrastructure located for in Guwahati.
8. The quotations shall include all Specification as detailed in the tender. Silence in any of the Specification will be interpreted as non-conformity with purchaser’s requirement. Tender enquiry may make this point clear to avoid further correspondence seeking clarification.
9. The rates quoted should indicate clearly all applicable taxes and should be in INR
10. If required, bidders will be invited to give a presentation in POWIET, Jorhat on the proposed item. However, concerned vendor will have to bear his/her own cost of travel to Jorhat.
11. The tender is liable to be ignored if complete information is not given therein or if the particulars and date (if any) asked for in the terms and conditions are not mentioned.

12. All the pages of the bid should be signed along with company's seal.
13. Evaluation Criteria: - Evaluation will be based on the Technical Proposal. Price Bid will be opened for only those bidder who is technically qualified
14. The Institute authority reserves the right to reject any or whole quotations without assigning any reasons thereof and does not bind itself to accept the lowest quotations whatsoever.
15. That in case of any disputes between concerned parties under the contract dispute shall be settled through amicable resolutions and if not then only courts of Guwahati will have exclusive jurisdiction to try and entertain suits between the parties under the Contract.

SECTION III TERMS AND CONDITIONS

1. The E.M.D. of the successful tenderer will only be released, when the successful bidder complete the installation and commissioning.
2. Interest will not be paid either on E.M.D. in any case for any period whatsoever.
3. Rates should be valid for a period of 120 days from the date of the opening of the price bid and that the Institute may give orders or repeated orders during this period.
4. The Institute Authority reserves the right to only procure some items at a time.
5. Payment will be made 100% after successful Installation to be certified by Institute Authority.
6. Bidders shall respond to Technical Specification in the prescribed format only as mentioned in **Section – VII** of Tender Document.
7. Bidders shall quote for price/commercial bid in the prescribed format only as mentioned in **Section – VIII** of Tender Document.
8. The terms and conditions of the tender are binding.

SECTION IV**DETAILS OF BIDDER**

Sl. No.	Required Details	
1	Name of the Bidder	
2	Address of the Bidder	
3	Contact No.	
4	Fax No.	
5	Mobile No.	
6	Email	
7	Name of Authorized Signatory	
8	Sales Tax /CST No.	
9	Income Tax No. /PAN/ GIR No.	
10	Year of Establishment	
11	Name and address of Banker	
12	EMD Details DD No and date: Amount: ` Name of the Bank:	
15	Tender Document Purchase Details DD No and date: Amount : ` Name of the Bank:	

SECTION V

ELIGIBILITY CRITERIA FOR PARTICIPATING IN THE TENDER (Valid & Up to date Documentary Evidence to be enclosed point wise)

1. The Bidder must have been in the IT Business for at least 3 year. Documentary evidence in support of this to be attached along with the tender Response
2. Copy of PAN Card & Sales Tax Registration, should also be submitted along with the offer.
3. The registration number of the bidder along with the CST Number & TIN Number allotted by the Sales Tax Authorities must be given in the tender bid.
4. Proposed solution should be vetted by the OEM with assurance for minimum five years support on the quoted product and model.
5. The Data sheets / Cross reference documents and technical documents submitted should be available on the global websites of the respective product manufacturer and the URL links to the respective documentation should be provided in the compliance statement. Any document which is not available on the Global website of the OEM would be treated as invalid document submitted and noncompliance against the technical Specification asked in the tender.
6. OEM's authorizing multiple bidders for the tender should ensure all the authorized bidders quote 100% compliant BOM and the BOM should be same with the same part codes with all the Authorized bidders.
7. Preference would be given if the Bidder is ISO 9001 and ISO 14001 Certified
8. The Bidder should have the experience of executing campus networking project at least two Govt/PSU/Central/state Govt institution.
9. The bidder should have technically qualified engineer on their payroll. Please provide the documentary evidence for the same.
10. Interested bidder may visit the site and can propose the exact bill of Material while quoting.

SECTION VI

Estimated Bill of Quantity.

Sr. No	Item Name	Make	Quantity	UOM
Active Component				
1	Core Switch 48 Port			
2	Gigabit Access Switch – 24 Port			
3	Gigabit Access Switch –48 Port			
4	Dual Band Indoor Access Point			
5	Indoor Access Point			
6	Enterprise ireless Controller			
7	Dual Band Outdoor Access point			
8	SM Fiber Transceiver			
9				
Passive Component				
1	6 core Single Mode Fibre			
2	24 Port LIU Loaded with SC Coupler and Connector			
3	Pig Tail			
4	Single Mode SC-LC Fibre Patch Cord			
5	Cat 6 UTP Cable			
6	24 Port gigabit Patch Panel			
7	48 Port Gigabit Patch panel			
8	Information Outlet with SMB			
9	UTP Patch Cord –1 Mtr			
10	UTP Patch Cord –2 Mtr			
11	6 U Rack			
12	27 U Rack			
13	1 KVA online UOS with 1 Hr. back up			

Sr. No	Item Name	Make	Quantity	UOM
Installation and Commissioning				
1	UTP Laying			
2	Optical Fiber Laying :			
3	LIU Fixing			
4	Fiber Splicing			
5	Rack Fixing			
6	Jack Panel Fixing and Punching			
7	I/O Fixing Charges			
8	Installation , commissioning and Documentation			

SECTION VII (Product Technical Specification)
Technical Specification

1. Core Switch		
Sl. No.		Revised Technical Specifications
1	Interfaces	48 auto-sensing RJ45 10/100/1000 ports
		4 X SFP ports each supporting 1Gbps Ethernet
		Console Port: 1 no.
2	Performance Summary	Switching throughput: 100 Gbps or more at Line-rate
		Energy Efficient Ethernet (EEE): IEEE 802.3az Energy Efficient Ethernet Task Force compliance
		Address database size: 8,000 MAC addresses or higher
		Number of VLANs: 1,024 VLANs (802.1Q) out of 4,093 VLAN IDs
		Number of multicast groups filtered (IGMP): 1K
		Number of Link Aggregation Groups (LAGs - 802.3ad): 8 LAGs with up to 8 ports per group or equivalent
		Number of hardware queues for QoS: 8 queues
		Number of static routes (IPv4): 32 or higher
		Number of IP interfaces (port or VLAN): 32 or higher
3	L2 Services - VLANs	Jumbo frame support: up to 9K packet size or higher
		IEEE 802.1Q VLAN Tagging (Up to 1,024 VLANs - 802.1Q Tagging)
		Spanning Tree Protocol-STP, RSTP, MSTP
		Subnet based VLANs
		MAC based VLANs
		Voice VLAN
		Private VLAN/Private Edge VLAN
4	L3 Services & DHCP	IEEE 802.1x - RADIUS authentication, MAC-based .1x
		DHCP IPv4 / DHCP IPv6 Client, DHCP IPv4 Server
		DHCP Snooping IPv4, DHCP Relay IPv4
		BootP IPv4
5	Network Monitoring and Discovery Services	Static Routing (IPv4 and IPv6)
		802.1ab LLDP
		SNMP V1, V2, V3, RMON 1,2,3,9
		Dynamic ARP Inspection or equivalent
		MAC Filtering, Port MAC Locking
6	Quality of Service (QoS) - Support	Private Edge VLAN/ Private VLANs
		DiffServ Support
		Class of service (802.1p/CoS)
7	Management	Auto-VoIP
		Password management
		Configurable Management VLAN
		CLI commands logged to a Syslog server
		Web-based graphical user interface (GUI) (Optional)
		Telnet
		IPv6 management
Port descriptions		
Port Mirroring		

		SSH V1/V2
		Syslog
8	Electromagnetic Emissions and Immunity Certifications	FCC Part 15 Class A, VCCI Class A or equivalent.
9	Safety Certifications	UL listed (UL 1950)/cUL/IEC 950/EN 60950/UL 60950 or equivalent
10	Warranty and Support	5 years hardware replacement warranty from OEM
		Product Lifetime Technical Support from OEM
		Product Lifetime Firmware Support from OEM

2. 24-port 10/100/1000 Base-T Smart Managed Access Switch with Fiber Uplinks		
Sl. No.		Revised Technical Specifications
1	Interfaces	24-port 10/100/1000 Base-T (Auto Uplink on all ports)
		2 Dual Personality SFP slots for fiber/Copper Gigabit Ethernet modules
2	Network Protocol and Standards Compatibility	IEEE 802.3 10BASE-T Ethernet
		IEEE 802.3u 100BASE-TX Fast Ethernet
		IEEE 802.3ab 1000BASE-T Gigabit Ethernet
		IEEE 802.3x full-duplex flow control
		Spanning Tree Protocol-STP, RSTP and MSTP
		Jumbo Frame Support (up to 9 KB)
		IEEE 802.1Q Tag VLAN
		IEEE 802.3ad static or dynamic link aggregation (LACP)
3	Performance Specifications	Switching Throughput: 50 Gbps or higher
		Priority queues: 4 or higher
		Priority queuing: Weighted Round Robin (WRR)
		Address database size: 8,000 media access control (MAC)
4	Certifications	FCC Part 15 Class A
		UL listed (UL 1950)/cUL/UL 60950
5	Management	GUI/CLI Based, Telnet/SSH, http/https
6	Warranty and Support	5 years hardware replacement warranty from OEM
		Product Lifetime Technical Support from OEM
		Product Lifetime Firmware Support from OEM

3. 48 Port Smart Managed Gigabit Access Switch with 2 Fiber Ports		
Sl. No.		Revised Technical Specifications
1	Interfaces	48 RJ-45 connectors for 10BASE-T, 100BASE-TX and 1000BASE-T (Auto Uplink on all ports)
		2 Shared/dedicated SFP ports/slots
2	Network Protocol and Standards Compatibility	IEEE 802.3 Ethernet
		IEEE 802.3u 100BASE-T
		IEEE 802.3ab 1000BASE-T
		IEEE 802.1p Class of Service
		IEEE 802.1D Spanning Tree (STP), RSTP, MSTP

3	Performance	Switching Throughput: 100 Gbps or higher
		Priority queues: 8 or higher
		Priority queuing: Weighted Round Robin (WRR)
4	Layer 2	VLAN, 802.1Q encapsulation
		MAC based VLANs
		Voice VLAN
		IGMP Snooping (v1, v2 and v3)
5	L3 Services	DHCP Client
		DHCP Snooping
		Static Routing
		VLAN Routing
		IP Source Guard
6	Security	L2 / L3 / L4 Access Control Lists (ACLs)
		IP-based ACLs (IPv4 and IPv6)
7	Management and Monitoring	Configurable Management VLAN
		RADIUS Support
		Web-based Graphical User Interface (GUI)/CLI
		IPv6 Management
8	LEDs	Power Indicator
		Per Port: Speed, Link/Activity
9	Electromagnetic Compliance	FCC Part 15 Class A
10	Safety Agency Approvals	UL listed (UL 1950)/cUL/UL 60950
11	Management	GUI/CLI Based, Telnet/SSH, http/https
12	Warranty and Support	5 years hardware replacement warranty from OEM
		Product Lifetime Technical Support from OEM
		Product Lifetime Firmware Support from OEM

4. Dual Band Wireless Indoor Access Point		
Sl. No.		Revised Technical Specifications
1	Physical Interfaces	One (1) 10/100/1000BASE-T Gigabit Ethernet (RJ-45) port with IEEE 802.3af/at Power over Ethernet (PoE) support
		One (1) console port with RJ45 Interface
		LED Indicators: Power, LAN and WLAN
2	Standards	IEEE 802.11a 5GHz
		IEEE 802.11g, IEEE 802.11b, 2.4GHz
		IEEE 802.11n standard, 2.4GHz and 5GHz
		WMM - Wireless Multimedia Prioritization
		Power over Ethernet (PoE) IEEE 802.3af
3	Security	Wi-Fi Protected Access (WPA, WPA2)
		IEEE 802.1x RADIUS authentication
4	Network Management	Remote configuration and management through Web browser, SNMP or Telnet with command line interface (CLI)
		SNMP support

5	Other Specifications	Rogue AP detection
		Ceiling mounting/ Wall mounting tool kits
		2x2 MIMO support
		Throughput per Radio: 300 Mbps or higher
		Deployment Options: Standalone & Controller Based
6	Warranty and Support	5 years hardware replacement warranty from OEM
		Product Lifetime Technical Support from OEM
		Product Lifetime Firmware Support from OEM

5. Wireless- Indoor Access Point		
Sl. No.		Revised Technical Specifications
1	Physical Interfaces	One (1) 10/100/1000BASE-T Gigabit Ethernet (RJ-45) port with Auto MDI-X with IEEE 802.3af Power over Ethernet (PoE) support
		LED Indicators: Power, LAN and WLAN
2	Standards	IEEE 802.11n, 2.4GHz
		IEEE 802.11g, IEEE 802.11b, 2.4GHz
		WMM - Wireless Multi Media Prioritization
		Power over Ethernet (PoE) IEEE 802.3af
3	Security	Wi-Fi Protected Access (WPA, WPA2)
		SSH/Telnet
4	Network Management	Remote configuration and management through Web browser, SNMP or Telnet with command line interface (CLI)
		SNMP Support
5	Advanced Wireless Features	Repeater mode
6	Other Specifications	Rogue AP detection
		Ceiling mounting/ Wall mounting tool kits
		Throughput : 300 Mbps or higher
		Max number of Concurrent Clients: 32 or higher
		Deployment Options: Standalone & Controller Based
7	Warranty and Support	5 years hardware replacement warranty from OEM
		Product Lifetime Technical Support from OEM
		Product Lifetime Firmware Support from OEM

6. High Performance Enterprise Class Wireless Controller with 50 AP Support		
Sl. No.		Revised Technical Specifications
1	Physical Specifications	Minimum 2X 1Gbps ports for Data and Control
		1X RJ-45 port for Management
		1 no. of Console port
2	Software Specifications	Supports 50 or more Access Points and minimum 1,000 concurrent clients per controller
		Secured communication between AP and Controller
		Data traffic can be forwarded without traversing the controller
		Layer 2 and Layer 3 seamless roaming/mobility
		Automatic RF coverage in the case of AP failure

		Rogue AP detection
		Support both indoor and outdoor APs
		Support 802.11b, 802.11g, 802.11n, 802.11a and 802.11ac
		Seamless Mobility across VLAN and subnets
		Supports 802.11i
		Band steering/directing/selecting mechanism to load balance traffic between 2.4 and 5GHz
4	QoS	WMM (802.11e) support
5	Wireless Security	WEP, WPA/WPA2-PSK
		RADIUS Accounting Protocol
		Integrated AAA Server
6	Wireless Network Monitoring	Summary of the Managed Access Points status, rogue Access Points detected, Wireless stations connected, Wireless Controller Information and Wireless Network usage
		APs status for the Managed Access Points and details that includes configuration settings, current Wireless settings, current Clients and detailed Traffic statistics
		Wireless Clients statistics and details per AP, per SSID
		Blacklisted/Rogue Clients, Roaming Clients
		Wireless Network Usage: Wireless 802.11 a/b/g/n/ac
		DHCP details for Wireless Clients
7	Management	HTTP, SNMP v1/v2c/v3, Telnet, Secure Shell (SSH)
		Logging and Reporting
		Managed Access Points Ping
		Save/Restore Configuration
		Firmware Upgrade via Web browser/CLI for the Wireless Controller and the Managed Access Points
8	General	IEEE 802.3u 100BASE-TX
		IEEE 802.3ab 1000BASE-T
		IEEE 802.1Q VLAN tagging
		IPv4 and IPv6 support
		Support for Active-standby Redundancy or 1+1/N+1 High Availability
		DHCP Server
9	Warranty, Support and Licenses	5 years hardware replacement warranty from OEM
		Product Lifetime Technical Support from OEM
		Product Lifetime Firmware Support from OEM

7. Dual Band Outdoor Access Point		
Sl. No.		Revised Technical Specifications
1	Physical Interface	Two 10/100/1000Base-T Ethernet (RJ-45) port with Auto Uplink with PoE PD (Power over Ethernet In)
		External/Internal Antenna Connectors for 2.4GHz antenna
		External/Internal Antenna Connectors for 5GHz antenna
		Default Reset Button

2	RF Characteristics	IEEE 802.11n
		IEEE 802.11g
		IEEE 802.11b
		IEEE 802.11a
		2.4GHz and 5GHz dual band concurrent operation. 2.4Ghz and 5GHz with minimum 2X2 MIMO, 2 Spatial Stream.
		Power over Ethernet (802.3af/at)
		802.3af or 802.3at Ports for AP operation
		Deployment Options: Standalone & Controller based
3	LEDs	Power, LAN, WLAN
4	External Antenna Characteristics	Outdoor Dual Band Omni Antenna
		Wireless Mode: 802.11 a/b/g/n
5	Management	GUI/CLI Based, Telnet/SSH, http/https
6	Warranty and Support	5 years hardware replacement warranty from OEM
		Product Lifetime Technical Support from OEM
		Product Lifetime Firmware Support from OEM

8. SM Fiber Transceiver

Sl. No.		Revised Technical Specifications
1	SFP Module	1000Base-LX Fiber SFP
		LC duplex connector
		1310 nm, for distances up to 10 km
		Single Mode Fiber
		Compliant with Specifications for IEEE 802.3z/Gigabit Ethernet
		Laser Class 1 Product which comply with the requirements of IEC 60825-1/IEC 60825-2

Specification for Passive Component:

Sl. No	Items	Specification
1	6 core Single Mode Fiber	Central loose tube 6 core SM with jelly compound, Corrugated Steel tape armoured. Outer Diameter (mm) 9+- 0.3; Thickness of Jacket (mm) 1.8+-0.2 Certified :ISO 11801,ICEA-640,EIA/TIA 455
2	24 Port LIU Loaded with SC Coupler and Connector	Aluminum base material for 24 port light mounting, 1 Unit mounting height, can include adapter panels for 24 SC terminations with accessories kit consist of cable ties, mounting ear screws, spiral wrap tube.
3	Pig Tail	Single Ended SM with SC adapter

4	Single Mode SC-LC Fiber Patch Cord	Duplex SC-LC adapter Patch cord SM with high precision ceramic, low insertion loss & return ;best performance endurance
5	Cat 6 UTP Cable	Category 6 Unshielded Twisted Pair Cable 23 AWG with 45P Jacket hardness Compliant with EIA/TIA standards by ETL CUL listed
6	24 Port gigabit Patch Panel	24 port Patch panel Cat 6 loaded with 1 U height rack mountable complaint with ANSI/TIA/EIA-568 C.2 standard
7	48 Port Gigabit Patch panel	48 port Patch panel Cat 6 loaded with 1 U height rack mountable complaint with ANSI/TIA/EIA-568 C.2 standard
8	Information Outlet with SMB	Cat 6 keystone terminating 4 pairs 23-26 AWG cable with single Face plate and Back box
9	UTP Patch Cord –1 Mtr	High density Polyethylene, Cat 6 bare Copper RJ-45 both end Patch cord 1 meter length
10	UTP Patch Cord –2 Mtr	High density Polyethylene, Cat 6 bare Copper RJ-45 both end Patch cord 2 meter length
11	6 U Rack	6 U Rack with all required Accessories
12	27 U Rack	27 U Floor Mount rack with Power Strips and Required accessories.

Specification for 1KVA UPS:

1KVA UPS with External Battery		
Sl. No.	Items	Technical Specification
1	Capacity(VA/W)	1000VA / 800W
2	Typology	Double Conversion
3	Efficiency	~90%
4	Input	
4.2	Voltage Range	160VAC to 280VAC
4.2	Frequency Range	45Hz to 55Hz
4.3	Power Factor	≥ 0.98
4.4	Phase	Single Phase with Ground
5	Output	
5.1	Output Voltage	220/230/240VAC
5.2	Output Frequency	50Hz to 52Hz
5.3	Waveform	Pure Sine wave
5.4	Transfer Time - Mains to battery	0 msec
6	Surge Protection and Filtering	
6.1	Surge Protection	Yes

7	Management	
7.1	Connectivity Ports	RS232 or USB
7.2	SNMP	Optional
8	External Battery	
8.1	Ratings	
8.1.1	Voltage	36VDC
8.1.2	Amperage	45A
8.2	Type	
8.2.1	Sealed Maintenance Free Lead Acid Battery	3X 12VDC
8.3	Environment	
8.3.1	Operating Temperature	32~104°F (0~40°C)
8.3.2	Humidity	20~90% Non-Condensing

Installation and Commissioning

1. UTP Laying	Laying of UTP Cat 6 Cable through PVC Casing Capping
2. Optical Fiber Laying :	Option I: Underground OFC laying through GI Grade PVC/ HDPE Pipe Option II : Over head OFC Laying. In case of Over head GI Guard wire will have to quote separately
3. LIU Fixing	Unit Price to be quoted
4. Fiber Splicing	Unit Price to be quoted
5. Rack Fixing	Unit Price to be quoted
6. Jack Panel Fixing and Punching	Unit Price to be quoted
7. I/O Fixing Charges	Unit Price to be quoted
8. Installation , commissioning and Documentation	Lump sum

SECTION VIII
Commercial/Price BID

Sr. No	Item Name	Ma ke	Quant ity	UOM	Unit Cost(Rs)	Total Cost(Rs)
A. Active Component						
1	Core Switch 48 Port			No.		
2	Gigabit Access Switch – 24 Port			Nos.		
3	Gigabit Access Switch –48 Port			No.		
4	Dual Band Indoor Access Point			No.		
5	Indoor Access Point			No.		
6	Enterprise ireless Controller			No.		
7	Dual Band Outdoor Access point			No		
8	SM Fiber Transceiver			No.		
B. Passive Component						
1	6 core Single Mode Fiber			Mtr		
2	24 Port LIU Loaded with SC Coupler and Connector			Nos		
3	Pig Tail			No.		
4	Single Mode SC-LC Fiber Patch Cord			No.		
5	Cat 6 UTP Cable			Box(305 Mtrs)		
6	24 Port gigabit Patch Panel			No.		
7	48 Port Gigabit Patch panel			No.		
8	Information Outlet with SMB			No.		
9	UTP Patch Cord –1 Mtr			No.		
10	UTP Patch Cord –2 Mtr			No.		
11	6 U Rack			No.		
12	27 U Rack			No.		
13	1 KVA online UPS with 1 Hr. Back up					

Sr. No	Item Name	Make	Quantity	UOM	Unit Cost(Rs)	Total Cost(Rs)
A. Installation & Commissioning						
1	UTP Laying			Mtr.		
2	Optical Fiber Laying :			Mtr.		
3	LIU Fixing			No.		

4	Fiber Splicing			No.		
5	Rack Fixing			No.		
6	Jack Panel Fixing and Punching			No.		
7	I/O Fixing Charges			No.		
8	Installation , commissioning and Documentation			Job.		

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Name, Designation & Signature of Bidder