

**Organisation Details**

Type: Central PSU  
 Ministry: Ministry of Coal  
 Department: Materials Management  
 Organisation Name: Bharat Coking Coal Limited  
 Office Zone: Bcl Dhanbad

**Buyer Details**

Name: Mrunal Mehta  
 Designation: Deputy Manager MM  
 Contact: -  
 No.: -  
 Email ID: mrunal.mehta@nic.in  
 GSTIN: 20AAACB7934MFZB  
 MM Department, level 3, Commercial Building, Koyla Bhawan,  
 Address: Koyla Nagar,  
 DHANBAD, JHARKHAND-826005, India

**Financial Approval Detail**

IFD Concurrence : Yes  
 Designation of Administrative Approval : DT(P&P)  
 Designation of Financial Approval : DT(P&P)

**Seller Details**

Company Name: HUE SERVICE PRIVATE LIMITED  
 Contact No.: 03322835240  
 Email ID: gem@hueservice.com  
 Address: 38A, BROAD STREET,  
 Kolkata, WEST BENGAL-700019, -  
 MSME verified: Yes  
 MSE Social Category: General  
 GSTIN: NA

**Product Details**

#	Item Description	Category Name	Model	HSN Code	Ordered Quantity	Unit	Price (Inclusive of all Duties and Taxes in INR)
1	FortiGate 601E (with 5Yrs support)	Firewall - NGFW	FortiGate 601E	HSN not specified by seller	1	pieces	2,999,900
2	Ruckus 10G-SFPP-LR-S	Small form-factor pluggable transceiver	Ruckus 10G-SFPP-LR-S	HSN not specified by seller	50	pieces	2,250,000
3	901-R610-WW00	Wireless Access Point	Ruckus 901-R610-WW00 + 902-0120-0000	HSN not specified by seller	120	pieces	7,320,000
4	24/12 Port LIU (12 Port Loaded LIU)	CAT 6 Patch Panel	24 Port LIU (12 Port Loaded LIU) (Molex) (Molex 24 Port LIU (12 Port Loaded LIU))	HSN not specified by seller	19	pieces	195,700
5	NRS-42U 600X1000	Networking/Server Rack	Netrack NRS 42U 600x1000	HSN not specified by seller	1	pieces	52,000
6	901-T310-WW40	Wireless Access Point	Ruckus 901-T310-WW40 + 807-T31D-5000	HSN not specified by seller	3	pieces	370,500
7	DIGISOL SM (OS2) UNITUBE, ARMOURED, 12 CORE	Fibre Cable for Networking	DIGISOL SM (OS2) UNITUBE, ARMOURED, 12 CORE	HSN not specified by seller	2,500	meter	247,500
		Networking/Server		HSN not			

8	WM-12-550500	Rack	WM-12-550500	specified by seller	18	pieces	241,200
9	P01-S104-IN00	Wireless Controller	Ruckus P01-S104-IN00+L09-0001-SG00(Q.130)+S02-S104-5000+S02-0001-5LSG(Q.130)+L09-0001-SGCX(Q.20)	HSN not specified by seller	2	pieces	3,026,000
10	LC-SC SM Fibre Patch Cord	Fibre Cable for Networking	Molex 91.9L.872.00300	HSN not specified by seller	50	meter	20,000
11	Molex 24 Port Cat6 Patch Panel 24 Port Loaded	CAT 6 Patch Panel	Molex PCD-00141-I	HSN not specified by seller	16	pieces	65,600
12	ICX7450-24	Layer-3 Core Switch	Ruckus ICX7450-24 + ICX7450-Prem-Lic + ICX7400-4X10GF*(3) + RPS15-E*(2) + ICX-FAN10-E*(2) + PCINDIA*(2) + ICX7450-SVL-RMT-5	HSN not specified by seller	4	pieces	2,100,000
13	CyberPower 1.0 KVA UPS	Online UPS	cyber power ols1000exl online ups	HSN not specified by seller	16	pieces	494,400
14	UTP CABLE	CAT 6 Cable for Indoor use	Digisol UTP	HSN not specified by seller	6,100	meter	97,600
15	ICX7150-24P-4X10GR	Layer 2 Access Switch	Ruckus ICX7150-24P-4X10GR+PCINDIA+ICX7150-SVL-RMT-5	HSN not specified by seller	16	pieces	2,816,000
16	RICHA 25MM CONDUIT PIPE	insulated electrical conduits Pipe	25MM CONDUIT PIPE	HSN not specified by seller	2,500	pieces	147,500
17	CAT 6 PATCH CORD MOLEX 1 MTR GREY	Cat 6 Patch cord	CAT 6 PATCH CORD	HSN not specified by seller	150	meter	21,000

Total Order Value (in INR)

**22,464,900**

### Consignee Detail

S.No	Consignee	Item	Quantity	Expected Delivery Date
1	Alok Kumar - Landline-- kul.b0478@nic.in Depot Officer, Central Store, Ekra, BCCL, Post Office- BANSJORA, Dhanbad, Jharkhand-828101., DHANBAD, JHARKHAND-828101, India	901-R610-WW00	120	25-Apr-2020
		901-T310-WW40	3	25-Apr-2020
		P01-S104-IN00	2	25-Apr-2020
		ICX7450-24	4	25-Apr-2020
		ICX7150-24P-4X10GR	16	25-Apr-2020
		FortiGate 601E (with 5Yrs support)	1	25-Apr-2020
		NRS-42U 600X1000	1	25-Apr-2020
		WM-12-550500	18	25-Apr-2020
		Molex 24 Port Cat6 Patch Panel 24 Port Loaded	16	25-Apr-2020
		UTP CABLE	6,100	25-Apr-2020
		CAT 6 PATCH CORD MOLEX 1 MTR GREY	150	25-Apr-2020
		24/12 Port LIU (12 Port Loaded LIU)	19	25-Apr-2020
		DIGISOL SM (OS2) UNITUBE, ARMOURED, 12 CORE	2,500	25-Apr-2020
		LC-SC SM Fibre Patch Cord	50	25-Apr-2020

CyberPower 1.0 KVA UPS	16	25-Apr-2020
RICHA 25MM CONDUIT PIPE	2,500	25-Apr-2020
Ruckus 10G-SFP-LR-S	50	25-Apr-2020

**Product Specification for FortiGate 601E (with 5Yrs support)**

Specification	Sub-Spec	Value
Specification	Type	NGFW
	Form Factor (RU)	1
	Features	Layer 3 - Layer 4,NAT,VPN,Application Visibility and Control (AVC),Next Generation Intrusion Prevention System (IPS)
	Traffic handled	TCP,UDP,HTTP/TCP,TCP/UDP
	Packet Size (KB)	64
	Throughput with all features enabled(Under Test Condition) (Mbps)	9000
	Throughput (Real World/Prod Performance)(Under Test Condition) (Mbps)	9000
	Concurrent Session/Concurrent Connection	8M
	New session/Connection per second	450K
	Type of Interface Supported Multiselect	10G SFP+
	Number of GE Copper interface	8
	Number of 10G SFP+ interface	2
	Number of QSFP+ 40 G interface	0
	Number of GE Small Form-Factor Pluggable (SFP) interface	8
	Number of QSFP28 100 G interface	0
	Number of col /WAN Ports	8
	Number of Ipsec VPN Peers supported (Site to Site)	2000
	Number of Ipsec VPN Peers supported (Client to Site)	50000
	Number of SSL VPN Peers supported (Client to Site)	10000
	Type of Storage Disk	SSD
	Storage Capacity (GB)	400
	Power Supplies	Dual Dual
	Hot Swappable Power Supply	Yes
	Redundant Fan	Yes
	Hot Swappable (Redundant Fan)	No
	Type of Processor	x86

High Availability Support	Yes
If Yes, High Availability from day 1	NA
Interface Expansion slots supported	0
Firewall Policies - License	Yes
Details of the Firewall Policies for the Firewall provided with the License	Web Security Essentials / URL Filtering,IPS License,Application Visibility License,APT (Advance Persistent Threat) License (Anti Malware Protection , C& C attacks, Geo IP Protection, Zero Day Threat Protection),Gateway Anti virus,Gateway Anti spam
NGIPS Signature supported	10000
Security Intelligence	IP,Domain
Certification	Common Criteria /NDPP/NSS
Minimum Operating Temperature (Degree C)	0
Maximum Operating Temperature (Degree C)	40
Minimum Operating Humidity (%RH)	10
Maximum Operating Humidity (%RH)	75
IPv6 Ready from day 1	Yes
On Site OEM Warranty (Year)	5

### Product Specification for Ruckus 10G-SFPP-LR-S

Specification	Sub-Spec	Value
Specification	Type of Transceiver	SFP+
	SFP Mode	Single
	Supported Protocols	802.3ae
	Compatibility with OEMs Products	Ruckus
	Wavelength(nm)	1310
	Fibre Cable Type	Single Mode Fiber
	Core Size (Micron)	62.5
	Maximum Data Rate	9
	Modal Bandwidth (MHz/Km)	500
	Max.Cable Distance	10
	Optical Component (nm)	1355
	Digital Optical Monitoring (DOM) Support	Yes
	Interface	LC
	Tx Power (dBm)	-8.2
	Receiver Sensitivity (dBm)	-9
	Operating Temperature Range(Degree C)	0-70
	Operating Humidity (RH) (%)	95%
On Site OEM Warranty (Year)	5	

### Product Specification for 901-R610-WW00

Specification	Sub-Spec	Value
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Specification

Type of Access Point	Controller Based
Deployment	Indoor
Mounting	Wall
Antenna Type	Internal
Number Of Radios	Dual
Frequency Band	2.4 GHz,5.0 GHz,2.4 GHz & 5.0 GHz
Supported Wi-fi Standards	802.11b/g,802.11 b/g/n,802.11ac,802.11 a/b/g/n/ac,802.11ac Wave 1,802.11ac Wave 2
Wireless Speed Up to (Mbps)	1750
Max Wireless Signal Range im Mts	50
Channel Width (MHz)	160
Maximum Data Rate MBps	1750
Supported Encryption	WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i, EAP-TLS.
Dedicated Console Port	Not Available
Receiver Sensitivity in db	-100
Transmit power (tx)(dBm)	27
Radio Resource Management such for power channel,coverage hole detection and performance optimization	Available
Support for Load Balancing between 2-4 Ghz and 5 Ghz	Available
Support for Configurable Carrier Threshold	Available
Device Management	Web-based Configuration Interface (GUI)
Support for Mesh Networking	Available
Support for QoS for Voice over Wireless	Available
Support for MU-MIMO	Available
Number of MIMO supported & Spatial Streams	3 X 3 :3
Number of WLAN (SSID) per AP	31
Maximum clients Nos	512
Support for Autonomous access-point option	Available
USB Ports	Available
Number of 10/100/1000 port	2
mGig support	Available
Fiber port (in case of outdoor AP)	Not Available
Support for Bluetooth Low Energy (BLE) support on AP	Not Available
Support for Beam forming	Available
Operate as a sensor for wireless IPS	Available
Support for QoS and Video Call Admission Control capabilities	Available
Support for Rogue access point detection	Available
Support for Wireless Intrusion Protection System	Available
WPC certified	Yes
Wi-Fi CERTIFIED	Yes
Support non-Wi-Fi detection for off-channel rogues and Containment for both radio	

while serving the client simultaneously	Available
Powering options (Such as AC/DC, 802/3af PoE, 802/3at PoE+), specify	AC/DC With With Power Addopter,802.3af PoE,802.3at PoE+
Power POE (Watt)	15
Environmental Standard : plenum-rated (UL2043) for Indoor and IP67 for Outdoor	Yes
Operating Temperature Range (Degree C)	0°C - 40°C
Operating Humidity (%RH)	95
Dimension (mm x mm x mm)	201X195X51
Weight (grams)	518
On Site OEM Warranty (Years)	5

### Product Specification for 24/12 Port LIU (12 Port Loaded LIU)

Specification	Sub-Spec	Value
GENERIC	CAT 6 patch Panel conforming to ANSI/TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	Patch panel suitability for (Category 6 Unshielded/Unshielded twisted pair or Category 6 Foiled/Unshileded twisted pair)	CAT 6 U/UTP
	Height of patch panel	1 U
	No. of ports (RJ 45)	24 Ports Un-Loaded
	Cable Management (Rear side)	With out
CONSTRUCTIONAL	Applications: 0BASE-T, 100BASE-TX Fast Ethernet, 1000BASE-T (IEEE802.3) , 100VG-AnyLAN (IEEE802.12), 250 MHz Broadband Video, Voice, T1, ISDN, 155/ 622 Mbps ATM , Power over Ethernet (POE, POE+, 4 PPOE)	Yes
	Material of patch panel	Cold rolled steel
	Modular plug fitting (RJ 45)	Individual ports for loaded
	Plug insertion durability	? 750 mating cycles"
	Holder for connector / module	Yes
	Dust protection for information outlet	No
CERTIFICATIONS	Category 6 patch panel / information outlet shall have valid verified certificate in channel from ETL /3P /GHMT /Delta/UL/Intertek as per CAT 6 standards ANSI//TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	If "Yes" Certificate Number - Must declare	ML18/45897
	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory as per Governing Specification	Yes
	Test report number	048ML26E
	Report date	01.01.2018
	Name and address of lab	INDIA LAB
	All the test reports shall furnish to the buyer/consignee on demand	Yes

### Product Specification for NRS-42U 600X1000

Specification	Sub-Spec	Value
	Type of Server Racks	Rack Enclosures
	Size of Server Rack Enclosure	42U
	Depth of the Rack (mm)	Upto 1000
	Mount Type	Free-Standing

Specifications

Front glass Door	Yes
Type of glass used in front door	Transparent Toughened Glass
Material used for rear door	SPCC Quality Cold Rolled Steel Metal
Both rear and front doors with Perforation	No
Side Panels With Key Locks and Slam Latch	Yes
Secure Locks	Available
Rear split door design	Yes
Keyboard Tray Sliding and Rotary	Yes
Shelf For CRT/TFT Display	Yes
Cable channel in rear side for cable management	Yes
Support cable entry from top or bottom	Yes
Vertical & Horizontal managers	Yes
Numbers of Rack trays	2
Number of Fan For Heat dissipation (nos)	2
Number of fan trays	2
Heavy Duty Caster Wheels	Yes
If yes, then Front Break Options	Available
Load Bearing Capacity (Kgs)	750
If Wall mount racks then ,Swing-Out Racks	NA
Dust or water resistant	No
PDU Power Strips	Available
Weight (Kg)	90
Warranty (Years)	5

**Product Specification for 901-T310-WW40**

Specification	Sub-Spec	Value
	Type of Access Point	Controller Based
	Deployment	Outdoor
	Mounting	Wall
	Antenna Type	Internal
	Number Of Radios	Dual
	Frequency Band	2.4 GHz & 5.0 GHz
	Supported Wi-fi Standards	802.11 a/b/g/n/ac,802.11ac Wave 2
	Wireless Speed Up to (Mbps)	867
	Max Wireless Signal Range im Mts	100
	Channel Width (MHz)	80
	Maximum Data Rate MBps	867
	Supported Encryption	WPA-PSK,WPA-TKIP,802.11,EAP-TLS,WPA AES
	Dedicated Console Port	Available
	Receiver Sensitivity in db	-101
	Transmit power (tx)(dBm)	24

Specification	Radio Resource Management such for power channel,coverage hole detection and performance optimization	Available
	Support for Load Balancing between 2-4 Ghz and 5 Ghz	Available
	Support for Configurable Carrier Threshold	Available
	Device Management	Web-based Configuration Interface (GUI)
	Support for Mesh Networking	Available
	Support for QoS for Voice over Wireless	Available
	Support for MU-MIMO	Available
	Number of MIMO supported & Spatial Streams	2 x 2 :2
	Number of WLAN (SSID) per AP	31
	Maximum clients Nos	512
	Support for Autonomous access-point option	Available
	USB Ports	Available
	Number of 10/100/1000 port	1
	mGig support	Not Available
	Fiber port (in case of outdoor AP)	Not Available
	Support for Bluetooth Low Energy (BLE) support on AP	Not Available
	Support for Beam forming	Available
	Operate as a sensor for wireless IPS	Available
	Support for QoS and Video Call Admission Control capabilities	Available
	Support for Rogue access point detection	Available
	Support for Wireless Intrusion Protection System	Available
	WPC certified	Yes
	Wi-Fi CERTIFIED	Yes
	Support non-Wi-Fi detection for off-channel rogues and Containment for both radio while serving the client simltaneously	Available
	Powering options (Such as AC/DC, 802/3af PoE, 802/3at PoE+), specify	AC/DC With With Power Addopter,802.3af PoE,802.3at PoE+
	Power POE (Watt)	24
	Environmental Standard : plenum-rated (UL2043) for Indoor and IP67 for Outdoor	Yes
Operating Temperature Range (Degree C)	-40°C to 65°C	
Operating Humidity (%RH)	95	
Dimension (mm x mm x mm)	260x209x103	
Weight (grams)	1650	
On Site OEM Warranty (Years)	5	

**Product Specification for DIGISOL SM (OS2) UNITUBE, ARMOURED, 12 CORE**

Specification	Sub-Spec	Value
Generic	Fibre cable generally conforming to IEC 60793-1, IEC 60793-2, and to conform other normative specifications as specified in IEC:60793 Part 1 and Part 2	Yes
	Fibre count	12
	Jacket material	HDPE
	Fibre type	Single mode OS2



	Nominal Cable weight Kg/Km - Must declare	1000
	Operational temperature range	-10 to +60 deg. C
	Storage temperature range	-10 to +60 deg. C
Constructional	Type of tube / no. of tube / no. of core per tube	Unitube /1/12
	Cable Armouring	Armoured with ECCS tape
	Each meter printed with sequential length counter of cable apart from marking requirement as per relevant specifications and certifications	Yes
Certifications	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory to conformity of the Specification	Yes
	Test report Number	DG-110
	Report date	17.03.2010
	Name and address of Lab	Banglore
	All the test reports and certificates shall furnish to the buyer/consignee on demand	Yes
Performance		

### Product Specification for WM-12-550500

Specification	Sub-Spec	Value
Specifications	Type of Server Racks	Rack Enclosures
	Size of Server Rack Enclosure	12U
	Depth of the Rack (mm)	Upto 500
	Mount Type	Wall mount
	Front glass Door	Yes
	Type of glass used in front door	Transparent Toughened Glass
	Material used for rear door	CRCA Steel
	Both rear and front doors with Perforation	No
	Side Panels With Key Locks and Slam Latch	No
	Secure Locks	Available
	Rear split door design	No
	Keyboard Tray Sliding and Rotary	No
	Shelf For CRT/TFT Display	No
	Cable channel in rear side for cable management	No
	Support cable entry from top or bottom	Yes
	Vertical & Horizontal managers	Yes
	Numbers of Rack trays	1
	Number of Fan For Heat dissipation (nos)	1
	Number of fan trays	1
	Heavy Duty Caster Wheels	NA
	If yes, then Front Break Options	NA
Load Bearing Capacity (Kgs)	50	
If Wall mount racks then ,Swing-Out Racks	NA	
Dust or water resistant	No	
PDU Power Strips	Available	

Weight (Kg)	15
Warranty (Years)	5

**Product Specification for P01-S104-IN00**

Specification	Sub-Spec	Value
Specification	Type of Controller (Appliance)	Hardware
	Number of access point Supported from day 1 (Numbers)	130
	Minimum Scalability -- Number of Access Points	1
	Maximum Scalability -- Number of Access Points	1024
	Concurrent End Client device support (Numbers)	25000
	Mounting Arrangement	Rack Mountable
	Frequency Band	2.4 & 5.0 GHz
	Ethernet Port	Available
	Number of Ethernet Port	4
	SFP Port	Not Available
	Number of SFP Port	0
	SFP/SFP+ (10 Gig Port)	Not Available
	Number of SFP/SFP+ (10 Gig Port)	0
	WLC support AC and DC powering options	Yes
	Management Interface	GUI
	Access control list	Available
	High Availability	Active : Active
	Client SSO	Ruckus Smart Redundancy Support
	Redundant Power Supply and Fans	Not Available
	Number of SSD Hard drive	0
	Supported Wi-fi Standards	802.11ac Wave 2
	Maximum Data Rate	10Gbps data throughput per node for next-generation 11ac networks
	Supported Encryption	802.11i
	Dynamic Airtime allocation on per WLAN, per AP, Per AP group	Support
	Flexible DFS to prevent additional 20/40 Mhz channels from going unused	Support
	AAA Services/Authentication methods	802.1x
	IP v6 support	Available
	Support for Mesh Networking	Available
	Support for QoS for Voice over Wireless	Available
	Support for MU-MIMO	Available
	Number of WLAN (SSID)	1024
	Maximum clients (Numbers)	25000
Radio Resource Management such for power channel,coverage hole detection and performance optimisation	Available	
Support for Load Balancing	Available	
mGig support	Not Available	

Support for Beam forming	Available
Operate as a sensor for wireless IPS	Available
Role-Based Policy Management	Available
Support for Rogue access point detection	Available
Deep Packet Inspection for Layer 4-7 traffic for user	Support
Support for Wireless Intrusion Protection System	Available
WPC certified	Yes
Wi-Fi CERTIFIED	Yes
Support non-Wi-Fi detection for off-channel rogues and Containment for both radio while serving the client simultaneously	Available
Operating Temperature Range (Degree C)	40
Operating Humidity (% RH)	85
Storage Humidity	95
Dimension (mm x mm x mm)	438X292.1X44
Weight (Grms)	5000
On Site OEM Warranty (Years)	5

### Product Specification for LC-SC SM Fibre Patch Cord

Specification	Sub-Spec	Value
Generic	Fibre cable generally conforming to IEC 60793-1, IEC 60793-2, and to conform other normative specifications as specified in IEC:60793 Part 1 and Part 2	Yes
	Fibre count	12
	Jacket material	LSZH
	Fibre type	Single mode OS2
	Nominal Cable weight Kg/Km - Must declare	10
	Operational temperature range	-10 to +60 deg. C
	Storage temperature range	-10 to +60 deg. C
Constructional	Type of tube / no. of tube / no. of core per tube	Unitube /1/12
	Cable Armouring	Unarmoured
	Each meter printed with sequential length counter of cable apart from marking requirement as per relevant specifications and certifications	Yes
Certifications	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory to conformity of the Specification	Yes
	Test report Number	048ML26E
	Report date	01/01/2018
	Name and address of Lab	Molex Lad India
	All the test reports and certificates shall furnish to the buyer/consignee on demand	Yes
Performance		

### Product Specification for Molex 24 Port Cat6 Patch Panel 24 Port Loaded

Specification	Sub-Spec	Value
	CAT 6 patch Panel conforming to ANSI/TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes

GENERIC	Patch panel suitability for (Category 6 Unshielded/Unshielded twisted pair or Category 6 Foiled/Unshileded twisted pair)	CAT 6 U/UTP
	Height of patch panel	1 U
	No. of ports (RJ 45)	24 Ports Loaded
	Cable Management (Rear side)	With
CONSTRUCTIONAL	Applications: 0BASE-T, 100BASE-TX Fast Ethernet, 1000BASE-T (IEEE802.3) , 100VG-AnyLAN (IEEE802.12), 250 MHz Broadband Video, Voice, T1, ISDN, 155/ 622 Mbps ATM , Power over Ethernet (POE, POE+, 4 PPOE)	Yes
	Material of patch panel	Cold rolled steel
	Modular plug fitting (RJ 45)	Individual ports for unloaded
	Plug insertion durability	? 750 mating cycles"
	Holder for connector / module	Yes
	Dust protection for information outlet	Yes
CERTIFICATIONS	Category 6 patch panel / information outlet shall have valid verified certificate in channel from ETL /3P /GHMT /Delta/UL/Intertek as per CAT 6 standards ANSI/TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	If "Yes" Certificate Number - Must declare	E137775
	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory as per Governing Specification	Yes
	Test report number	E137775
	Report date	07/11/2012
	Name and address of lab	UL
	All the test reports shall furnish to the buyer/consignee on demand	Yes

### Product Specification for ICX7450-24

Specification	Sub-Spec	Value
Generic	Type Of Core Switch	Non Chassis Based
	No. of Interface Slots	0
	No. of MPU/SUP/Fabric Slots (with redundancy)	0
	No. of Power supply (with redundancy)	2
	No. of FAN Tray	2
	No. of 1G/10G SFP+ Port	12
	No. of 1000 base-T Ports	24
	Support for 40G QSFP+ Port	No
	Number of 40G Q SFP+ Porta	0
	Support for 100G QSFP+ Port	No
	Number of 100 G QSFP+ Port	0
	Console Port	Available
	Modular OS	Available
	Support for virtual Chassis	No
	Switching Capacity (Gbps)	288
	Throughput (MPPS)	214

Advance Layer-3 Protocol	OSPF,BGP,VRP,VRF,PBR
Security Feature	802.1X,MAC Auth.,DHCP snooping,RADIUS/TACACS/TACACS+,SSHv2,RADSEC
Management Protocol	RSPAN,TFTP,TELNET Client and Server,VCT,SCP,sFlow,NMPv1/v2c
QoS	ACL Mapping/Marking ofToS/DSCP(CoS),Honoring DSCP&802.1p (CoS),Priority Queue Manage using WRR, SP
Dimension/ Form Factor(RU)	440x393.7x43.7mm;1U
Wattege (Watt)	500
Operating Temperature (Degree C)	?5°C to 50°C/23°F to 122°F
Operating Humidity (RH)(%)	10% to 90% at 50°C, non-condensing
IPv6 Ready	Yes
On Site OEM Warranty(Year)	5

### Product Specification for CyberPower 1.0 KVA UPS

Specification	Sub-Spec	Value
Generic	Rating in KVA (KVA)	1.0 KVA
	Technology	IGBT-PWM without inbuilt isolation transformer
	Input Power	single phase 160V - 260V sinewave,50Hz
	Output power	Single phase 230V +/-1% sinewave 50 Hz
	Backup time (Minutes)	15
	Minimum VAH (VAH)	432
	Warranty for UPS (Years)	5
	Movable trolley for Batteries	Without trolley but with rack
	Warranty for battery	2
	Degree of Protection	IP21
	Cabling 5 meters for input and out put	With
	Paralleling kit for synchronising	With
Installation and Commissioning	Yes	
Constructional	Minimum thickness of M.S.Sheet Enclosure duly painted (mm)	1.0
	Type of Battery	SMF-VRLA conforming to JISC:8702(Pt.I,II&III)
Functional	Maximum overshoot and Under shoot of output rated voltage	4
	Voltage Regulation from no load to full load (%)	< / = 3%
	20% Overload limit for minimum 10 minutes	Yes
	Overall Efficiency (%)	>/=90%
	Total Harmonic Distortion(THD) (%)	Maximum 3%
	50% Overload limit for minimum 1 minutes	Yes
Protection	Protection for under voltage at battery terminal at 10.5V per 12 V battery	Yes
	Protection of Over voltage,Short Circuit & over load at UPS output terminal	Yes
Metering And Indications	Digital Metering in UPS for AC Input Voltage,Output AC Voltage,Current,Frequency,Battery Voltage and Current	Yes
	Indicators for mains presence,Battery charging and discharging,Output Over Load, Low Battery Voltage	Yes

Reports And Certification	Damp Heat : in accordance with IS:9000(part 5/sec.2)1981 at Temperature of 40 degree C,two cycles of (12+12) hours each 2007)	Yes
	Dry Heat Test : in accordance with IS:9000 (part 3/sec.5)1977 (reaffirmed 2007) at 55 degree C for 16 hrs	Yes
	Cold Test : in accordance with IS:9000 (Part 2/Sec.4)1977 (Reaffirmed 2007) at -10 degree C for 4 hrs.	Yes
	Availability of the Type Test Report from Central Govt. /NABL/ILAC Accredited lab covering all technical requirements.	Yes
	Type Test Certificate No.	TR/15-16/014/09
	Type Test Certificate date	TR/15-16/014/09
	Name of Lab	TR/15-16/014/09
	Address of Lab	TR/15-16/014/09
	As per Meity (Government of India) guidelines UPS shall have valid BIS CRS certifications as applicable	Yes

### Product Specification for UTP CABLE

Specification	Sub-Spec	Value
GENERIC	Cate 6 cable conforming to ANSI/TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	Cable category: Category 6 Unshielded/Unshielded twisted pair or Category 6 Foiled/Unshileded twisted pair or Category 6 Shielded /Foiled Twisted Pair	CAT6 U/UTP
	Cable colour	Green
	Conductor diameter	0.51 mm (24 AWG)
	Conductor count (in Nos.,)	8
	Length of cable in a bundle (Mtrs)	305 mtrs.
CONSTRUCTIONAL	"CAT6 Cable can transmit data at 1000 Mbps (~1 Gigabit per second) with a frequency of 250 MHz and suitable for 10BASE-T, 100BASE-TX Fast Ethernet and 1000BASE-T / 1000BASE-TX (Gigabit Ethernet)."	Yes
	Maximum DC resistance - in Ohm/Km	Max. 100 Ohm/Km
	Conductor Materail	Bare Copper
	Conductor Insulation Material	Polyethylene
	Cable jacket material	Low Smoke zero halogen (LSZH)
	Conductor stranding	Solid
	Cable should have internal cross separator	Yes
	Storage temperature range	minus 20 degree C to plus 60 degree C
	Operating temperature range	minus 20 degree C to plus 60 degree C
Each meter printed with sequential length counter of cable apart from marking requirement as per relevant specifications and certifications	Yes	
CERTIFICATIONS	Category 6 cable shall have valid verified certificate from ERTL/ETL /Intertek/3P /GHMT /Delta/UL as per CAT 6 standards ANSI//TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	If "Yes" Certificate Number - Must declare	Dsl1920
	UL Marking on Cable	Yes
	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory to conformity of the Specification	Yes
	Test report Number	Dsl 1920
	Report date	01feb2019
	Name and address of Lab	Inhouse

**Product Specification for ICX7150-24P-4X10GR**

Specification	Sub-Spec	Value
Specification	Type of Switch	Managed
	Technology	PoE+
	Number of 1G Copper Ports	24
	Number of 10G Copper Ports	0
	No. of 1 G SFP Port (Uplink)	0
	No. of 10 G SFP+ Port (Uplink)	4
	Multi-Gigabit Support	No
	Redundant Power supply ( from day one)	Not available
	Console Port	Available
	Switching Capacity -Non Blocking (Gbps)	132
	Throughput (MPPS)	98
	Operating System	Available
	Dedicated Stacking Port/Slot ( from day one)	Not available
	Stacking Bandwidth (Gbps)	480
	Basic Layer-3 Protocol	RIP v1/v2,RIPng,ECMP, Routing Between Directly Connected Subnets,Layer 3/Layer4 ACLs
	Security Feature	802.1X/Flexible/MAC/Web authentication,DHCP snooping,RADIUS/TACACS/TACACS+,SSHv2
	Management Protocol	DHCP,TFTP,Telnet,web,CLI,Bootp,SNMPv1/v2c
	QoS	ACL Mapping and Marking of ToS/DSCP (CoS), ACL Mapping and Marking of 802.1p
	Operating Temperature Range (Degree C)	0-45
	Operating Humidity (RH)(%)	0-95%
	IPv6 Ready from day one and dully certified	Yes
PoE Power Budget ( Watt )	370	
on Site OEM Warranty	5	

**Product Specification for RICHA 25MM CONDUIT PIPE**

Specification	Sub-Spec	Value
GENERIC	Conformity to Indian Standard	IS:9537( Part-3) Latest
	Classification of Conduit	Heavy Mechanical Stresses
CONSTRUCTIONAL	Material	PVC
	Nominal Size of the Conduit, (mm)	25
	Length (Metres)	3
	Socket ended conduit (at one end )	Yes
CERTIFICATION	ISI Marked	Yes
	CM/L No	8604577
	Availability of Test Reports from Central Govt./State Govt/NABL/IL AC accredited Lab covering all the Declared Parameters as per IS Specification	YES
	Test Report No and Date	5294/17-03-2017
	Name of the Lab	NABL

**Product Specification for CAT 6 PATCH CORD MOLEX 1 MTR GREY**

Specification	Sub-Spec	Value
GENERIC	Cate 6 patch cord conforming to ANSI/TIA/EIA-568 C.2 or ISO/IEC:11801 latest	Yes
	Patch cord type : Category 6 Unshielded/Unshielded twisted pair or Category 6 Foiled/Unshielded twisted pair	CAT6 U/UTP
	Patch cord colour	Grey
	Conductor diameter	24 to 26 AWG
	Length of Patch cord (Mtrs)	1.0
CONSTRUCTIONAL	Applications: 0BASE-T, 100BASE-TX Fast Ethernet, 1000BASE-T (IEEE802.3) , 100VG-AnyLAN (IEEE802.12), 250 MHz Broadband Video, Voice, T1, ISDN, 155/ 622 Mbps ATM , Power over Ethernet (POE, POE+, 4 PPOE)	Yes
	Termination type / Connection type	Insulation Piercing Connection (IPC)
	Modular plug	RJ45
	Plug insertion durability	? 750 mating cycles"
	Conductor Materail	Stranded copper
	Conductor Insulation Material	Polyethelene
	Cable jacket material	Low Smoke zero halogen (LSZH)
	Storage temperature range	-20 deg.C to +60 deg.C
CERTIFICATIONS	Operating temperature range	-20 deg.C to +60 deg.C
	Category 6 patch cord shall have valid verified certificate in channel from ETL /3P /GHMT /Delta/Intertek /UL as per CAT 6 standards ANSI//TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
	If "Yes" Certificate number - Must declare	739298
	UL Marking on Cable	Yes
	Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory as per Governing Specification	Yes
	Test report number	63222
	Report date	01-12-2018
	Name and address of lab	INDIA LAB
All the test reports shall furnish to the buyer/consignee on demand	Yes	

**Corrigendum**

1. 503588.pdf :[click here](#)
2. Extended Upto : 2020-02-01 12:00:00
3. Extended Upto : 2020-02-08 11:00:00

**Terms and Conditions****1. Special terms and conditions****1.1**

Calculation of Minimum VAH based on Back up time

Minimum VAH requirements would be calculated on the basis of following:

(VAH Calculation: Battery Voltage x Battery Ah x No. of Batteries = VAH)



UPS Rating	15 Minutes	30 Minutes	60 Minutes	90 Minutes	120 Minutes	180 Minutes	240 Minutes
1 KVA	400 VAH	800 VAH	1600 VAH	2400 VAH	3200 VAH	4800 VAH	6400 VAH
2 KVA	800 VAH	1600 VAH	3200 VAH	4800 VAH	6400 VAH	9600 VAH	12800 VAH
3 KVA	1200 VAH	2400 VAH	4800 VAH	7200VAH	9600 VAH	14400 VAH	19200 VAH
5 KVA	2000 VAH	4000 VAH	8000 VAH	12000 VAH	16000 VAH	24000 VAH	32000 VAH
6 KVA	2400 VAH	4800 VAH	9600 VAH	14400 VAH	19200 VAH	28800 VAH	38400 VAH
7.5 KVA	3000 VAH	6000 VAH	12000 VAH	18000 VAH	24000 VAH	36000 VAH	48000 VAH
10 KVA	4000 VAH	8000 VAH	16000 VAH	24000 VAH	32000 VAH	48000 VAH	64000 VAH
15 KVA	6000 VAH	12000 VAH	24000 VAH	36000 VAH	48000 VAH	72000 VAH	96000 VAH
20 KVA	8000 VAH	16000 VAH	32000 VAH	48000 VAH	64000 VAH	96000 VAH	128000 VAH
30 KVA	12000 VAH	24000 VAH	48000 VAH	72000 VAH	96000 VAH	144000 VAH	192000 VAH
40 KVA	16000 VAH	32000 VAH	64000 VAH	96000 VAH	128000 VAH	192000 VAH	256000 VAH
60 KVA	24000 VAH	48000 VAH	96000 VAH	144000 VAH	192000 VAH	288000 VAH	384000 VAH
80 KVA	32000 VAH	64000 VAH	128000 VAH	192000 VAH	256000 VAH	384000 VAH	512000 VAH
100 KVA	40000 VAH	80000 VAH	160000 VAH	240000 VAH	320000 VAH	480000 VAH	640000 VAH

## 2. General Terms and Conditions

**2.1** This Contract between the Seller and the Buyer, is for the supply of the Goods and/ or Services, detailed in the schedule above, in accordance with the General Terms and Conditions (GTC) as available on the GeM portal (unless otherwise superseded by Goods / Services specific Special Terms and Conditions (STC) and/ or BID/Reverse Auction Additional Terms and Conditions (ATC), as applicable

**2.2 Terms of delivery:** Free Delivery at Site including loading/unloading. In respect of items requiring installation and / or commissioning and other services in the scope of supply (as indicated in respective product category specification / STC / ATC), and the cost of the same is also included in the Contract price.

**2.3 Delivery period:** The Delivery Period/Time shall be essence of the Contract and delivery must be completed not later than such date(s). Any modification thereto shall be mutually agreed and incorporated in the Contract as per the provisions of the GTC.

**2.4 Performance Security:** If the Seller fails or neglects to observe or perform any of his obligations under the contract it shall be lawful for the Buyer to forfeit either in whole or in part, the Performance Security furnished by the Seller.

**2.5 Taxes and Duties:** Contract Prices are all inclusive i.e. including all taxes, duties, local levies / transportation / loading-unloading charges etc. Break up of GST shall be indicated by the Seller while raising invoice / bill on GeM. While submitting the bill / invoice Seller shall undertake that the Goods and Services Tax (GST) charged on this bill is not more than what is payable under the provision on the relevant Act or the Rules made there under and that the Goods on which GST has been charged have not been exempted under the GST Act or the Rules made there under and the charges on account of GST on these goods are correct under the provision of that Act or the rules made there under.

**2.6 Octroi Duty and / or other local taxes:** Contract Prices are all inclusive hence no reimbursement over and above the contract price(s) shall be allowed to seller towards payment of local taxes (such as levy of town duty, Octroi Duty, Terminal Tax and other levies of local bodies etc).

**2.7 Limitation of Liability:** The provisions of limitation of liability between Buyer and Seller as given in the GTC shall be applicable here.

**2.8 Resolution of disputes:** The provisions of DISPUTE RESOLUTION BETWEEN BUYER AND SELLER as given in the GTC shall be applicable here.

**2.9 Liquidated Damages:** If the Seller fails to deliver any or all of the Goods/Services within the original/re-fixed delivery period(s) specified in the contract, the Buyer will be entitled to deduct/recover the Liquidated Damages for the delay, unless covered under Force Majeure conditions aforesaid, @ 0.5% per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value without any controversy/dispute of any sort whatsoever. In case, Service Level Agreement (SLA) is applicable the same shall be applicable for the Contract.

### 2.10 Financial Certificate:

**2.10.1** The expenditure involved for this purpose has received the Sanction of the competent financial authority.

**2.10.2** The funds are available under the proper head in the sanction budget allotment for the concern financial year.

**2.10.3** I have been fully authorized by the department to sign the supply order or incur the liability of the Goods being ordered.

**2.11** The bidder should submit a self declaration to the effect in bidder's official letter head that their agency have not been black listed by any Agency whatsoever till date.

## 3. Additional Terms and conditions

**3.1** Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

**3.2** Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one

within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.

**3.3 Dedicated /toll Free Telephone No. for Service Support :** BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.

**3.4 Escalation Matrix For Service Support :** Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

**3.5 IMPORTED PRODUCTS:** In case of imported products, OEM or Authorized Seller of OEM should have a registered office in India to provide after sales service support in India. The certificate to this effect should be submitted.

**3.6 Bidder Turn Over Criteria:** The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.

**3.7 ISO 9001:** The bidder must have ISO 9001 certification.

**3.8 OPTION CLAUSE:** The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

**3.9 Timely Servicing / rectification of defects during warranty period:** After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 3 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG).Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imburse the cost of such service / rectification to the Buyer.

Note: This is system generated file. No signature is required. Print out of this document is not valid for payment/ transaction purpose.