

No. EI-D/GA/1-60/2011  
ERNET India  
(An Autonomous Scientific Society under Department of Information Technology, GoI)  
10<sup>th</sup> Floor, Jeevan Prakash Building,  
25, K.G. Marg  
New Delhi – 110 001.

Dated : 23<sup>rd</sup> December' 2011

To

M/s Usha Infotech  
204, Shakuntla Building,  
59, Nehru Place,  
New Delhi – 110 019.

**Subject : Supply and Installation of 4E1 Ethernet Converter (Atrie 4E1 TX) – reg.  
(Sl. No. 108/2011-12)**

Sir,

Kindly refer to our tender enquiry of even number dated 04.08.2011 and your commercial offer dated 17.08.2011, a rate contract for purchase of 4E1 Ethernet Converter (Atrie 4E1 TX) @ Rs.17,325/- per pair valid for a period of one year is awarded to your firm.

2. On the basis of this rate contract, first purchase order is placed on your firm for supply and installation of three pairs of 4E1 Ethernet Converter (Atrie 4E1 TX), as per Technical Specifications attached as Annexure, at a total cost of **Rs.51,975/- (Rupees Fifty One Thousand Nine Hundred Seventy Five only)** as per the terms and conditions indicated below:-

3. The above price is inclusive of VAT, delivery and installation at our premises.

4. **WARRANTY :**

1) Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts free software up grades. The defects, if any shall be attended to on immediate basis but in no case any defect should prolong for more than 24 hours. The Comprehensive Warranty shall be for a minimum period of one year from the date of acceptance of the equipment by ERNET India. However, AMC order will be issued separately after completion of warranty period on the quoted rates.

5. **Payment Terms :**

90% payment shall be made by ERNET India after delivery, testing and acceptance of the equipment as well as receipt of pre-receipted bill in duplicate. 10% payment would be released after expiry of the warranty. However, release of 100% payment would be considered subject to furnishing of Bank Guarantee of the amount equivalent to 10% of the cost of the equipment drawn on any Indian Nationalized Bank in favour of ERNET India valid for the period of warranty.

6. **DELIVERY PERIOD**

The delivery is required within four weeks on placement of the purchase order. However, ERNET India has the right to reduce the delivery period from 4 weeks depending upon the requirement of the equipments. Any delay by the supplier in the performance of delivery of items shall render the supplier liable to any or all the following sanctions-forfeiture of its Earnest Money Deposit, imposition of liquidated damage as per para 7 below or / and cancellation of the purchase order for default.

7. **LIQUIDATED DAMAGES**

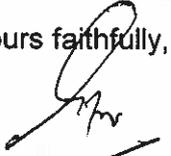
In the event of the Supplier's failure to have the stores ready for shipment / delivery by the date / dates specified in this Purchase Order, ERNET India may at its discretion withhold any payment, until the whole of the stores have been supplied by the contractor, as liquidated damages and not any way of penalty at the rates of 1% of the consignment value per week or a part of a week subject to a maximum of 10%. The amount towards Liquidated Damage would be recovered from the amount of Bank Guarantee furnished by the firm or any payment due to the firm.

8. **INSPECTION**

ERNET India or its representative shall have the right to inspect or to test the items to confirm their conformity to the ordered specifications. The supplier shall provide all reasonable facilities and assistance to the inspector at no charge to ERNET India. In case any inspected or tested goods fail to conform to the specifications, ERNET India may reject them and supplier shall either replace the rejected goods or make all alterations necessary to meet specification required free of cost to ERNET India.

Please acknowledge the receipt of the above.

Yours faithfully,

  
(Gulshan Kumar)  
Deputy Director

Copy to :

Dir(DS) / SM(DKB) / CFO / Registrar & CPO /  Master Folder

## Technical Specification of 4E1 to Ethernet Converter

- Transparent transfer Ethernet data in 1 to 4 E1 channels 10M/100M Ethernet, full/half duplex self adapt, support VLAN.
- Ethernet support AUTO-MDIX( cross over and straight through self adapt)
- Allow 4 E1 channels up to 10ms transfer delay. When the delay over the limitation, can stop transfer automatically.
- Loop back functions: E1 local loop, E1 external loop, it should have push button on the front panel of the converter (Analog, Dig, Remote & pattern)
- support reset remote system from local system.
- E1 Support 75Ω/unbalance impedance or 120Ω/balance for order having Ethernet monitor auto reset function.

### **Specification:**

#### **E1 interface**

- Standard: E1 interface compatible with G.703 standard.
- Rate: 2.048Mbit/s±50ppm
- Coding: HDB3
- Impedance: 75Ω(unbalance) or 120Ω(balance)
- Connector: BNC(75Ω) or RJ45(120Ω)
- Jitter Performance: According to G.742 and G.823

#### **10/100Base-T**

- Rate: 10M/100M, full/half duplex self adapt.
- Protocol: support IEEE 802.3, IEEE 802.1 P, 802.1Q (VLAN)
- MAC address table: 4096 MAC addresses.
- Ethernet buffer: 64Mbits SDRAM

**Configuration:** It should have Dip Switches or other keyboard on the front panel for configuration.

#### **LED Indication:**

- E1 Status LED on the front panel of the device.
- LNK,WTX,PWR,SPD,WRX,TEST.

#### **Operating environment**

- Voltage: DC-48V , input range: DC-36V~DC-72V
- Voltage:AC220V,input range: AC90V~AC260V
- Power Consumption: <=5 Watts
- Working temperature: 0°C~50°C
- Storage temperature: -40°C~+70°C
- Humidity: 95%

