



## TYPE: *Sepitam-4E1-1FE*



### Introduction

This interface converter is based on FPGA, using reverse direction multiplexing technology to bundle for multiple E1 circuits to transmit the Ethernet data of 4Channel 100BASE-TX. It can realize 1~4 E1 channel to convert between Ethernet optical interface. This device can transmit the transceiver signal point to point to Ethernet optical interface to make E1 channels interconnected with Ethernet optical interface. Unlike general remote network bridge, this device can support 1-4Channel E1 channel configuration, can automatically detect the number of E1 and select the E1 available. It allows E1 lines transmission time delay difference.

### Features

- ◆ Based on self -copyright IC
- ◆ To achieve Ethernet data transparent transmission in 1-4E1 circuits
- ◆ Can realize the local and the remote device reset
- ◆ Ethernet Interface is 100BASE-FX, support VLAN protocol
- ◆ Inter-set dynamic Ethernet MAC address (4,096) with local data frame filtering function
- ◆ Single Channel lines rate is 1984Kbit/s, 4Channel Bandwidth is up to 7936Kbit/s
- ◆ Support all set of Ethernet Work Mode
- ◆ CRC automatic alarm threshold can be set to isolate the poor quality transmission lines and cut off a single-direction. When 2M branch circuit one direction error rate exceeds threshold, cutting off this direction the other direction is not affected; that is to say, both of the Ethernet direction transmission can be asymmetric
- ◆ Allow 4Channel E1 transmission time delay difference 100ms. When the margin exceed the allowed range, the system can automatically stop on the E1 that time delay is too large to send data
- ◆ E1 interface conform to ITU-T G.703, G.704 and G.823, not support the use of signal timeslot
- ◆ E1 interface module with inter-set clock recovery circuit and HDB3 code circuit
- ◆ Support E1 channel hot-plug in the device, and automatically detects the effective
- ◆ channel and will not interrupt data transmission
- ◆ Can support 1-4Channel E1 channel configuration, can automatically detect the number of E1 and select the E1 available;



## Parameters

### • E1 Interface

Interface Standard:	comply with protocol G.703;
Interface Rate:	n*64Kbps $\pm$ 50ppm;
Interface Code:	HDB3;
E1 Impedance:	75 $\Omega$ (unbalance), 120 $\Omega$ (balance);
Jitter tolerance:	In accord with protocol G.742 and G.823
Allowed Attenuation:	0~6dBm

### • Ethernet interface(10/100M)

Interface rate:	10/100 Mbps, half/full duplex auto-negotiation
Interface Standard:	Compatible with IEEE 802.3, IEEE 802.1Q (VLAN)
MAC Address Capability:	4096
Connector:	RJ45, support Auto-MDIX

### • Working environment

Working temperature:	-10° C ~ 50° C
Working Humidity:	5%~95 % (no condensation)
Storage temperature:	-40° C ~ 80° C
Storage Humidity:	5%~95 % (no condensation)

## Specifications:

Model	Model Number: Sepitam-4E1-1FE
Functional Description	4E1/1FE interface Converter
Port Description	4* E1 interface; 1 *FE interface
Power	Power supply: AC180V ~ 260V; DC - 48V; DC +24V Power consumption: 10W
Dimension	Product Size: 216X140X31mm (WXDXH)
Weight	1.3KG



# Technical Specification of Sepitam-4E1-1FE

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