E485

RS485/422 to E1 Converter User Manual

Introduction:

E485 interface converter supports the conversion between E1 interface which accord with the ITU-T G.703 standard and RS-485/422 interface, it can receive synchronous data of 2.048Mbps from E1 network, and transmit the data to ROUTER or other devices. The mode of interface is DCE, and it can be connected with DTE or DCE devices.

Packing List:

E485 is shipped with following items.

1. E485×1
2. 220V power line ×1
3. User manual ×1

Features:

1.Convert RS485/422interface to E1(2M unframed G.703) interface

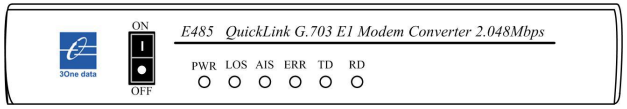
2. Support line recovery clock,local clock and equipment clock

3. Support E1 port loop

4. E1 (G.703) interface support 120ohm (RJ-45) and 75ohm (BNC double coaxial)

Description on Installation and Panels:

1.The product front panel sketch map:



indicator define:

PWR Power indicator. Brightness if electrify.

LOS Frame misstep alarm indicator light

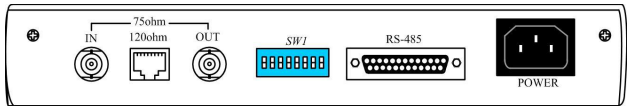
AIS Upriver E1 line alarm indicator light

ERR E1 line cut alarm indicator light.

TD Receive data indicator light from G.703 network, bright as having data receive

RD Send data indicator light from G.703 network, bright as having data receive

2.The product back panel sketch map:



POWER -48VDC/5VDC/220VAC input choice

ON/OFF power switch

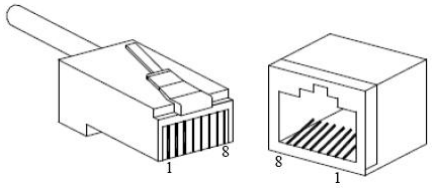
Rx/75 ohm E1-75Ω input

Tx/75 ohm E1-75Ω output

RS-485 RS-485/422 interface(input and output)

Definition of balanced Twisted Pair(120 ohm) wire sequence for RJ45 interface and RS485/422 interface:

1. 120Ω/RJ45 PIN define



NO.	Function define	I/O
1	NC(null)	
2	RX+(receive data +)	Input
3	RX-(receive data -)	Input
4	GND(ground)	
5	GND(ground)	
6	TX+ (send data+-)	Output
7	TX- (send data -)	Output
8	NC(null)	

2. RS-485/422 interface define(DB25 interface)

RS-485：

NO.3 485-(B)

NO.16 485+(A)

RS-422：

NO.	Function define	I/O
2	RX-	I
3	TX-	O
7	GND	
14	RX+	I
16	TX+	O

DIP switch setup (Function setup switch SW1):

1. Impedance setup(NO.1)

OFF: 120ohm ON: 75ohm

2. BNC connect ground setup

NO.2 OFF: No connect ground

ON: Out port connect ground

NO.3 OFF: No connect ground

ON: In port connect ground

3. Clock setup(NO.4)

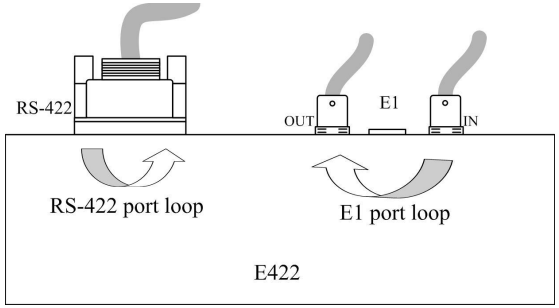
OFFinternal clock

ON line resume clock

4. Loop setup

NO.8 OFF no-loop ON E1 port loop

NO.9 OFF no-loop ON RS-422 port loop



Specifications:

E1 interface

Standard: Comply with ITU-T G.703

Output tingle displace: accord ITU-TG.735 advice

Input tingle limit: accord ITU-TG.823 advice

Output tingle: accord ITU-T G.823 advice

Frame format: unframed

Interface rate: 2.048Mbps±50ppm

CRC checkout: no

Port coding: HDB3

Port transmission: 2KM

Port protection: 1500W surge protection, 15KV ESD protection

Port connector: 120 Ohm(RJ-45) and 75 ohm(BNC double coaxial)

RS-485/422 port

Standards Compliance: EIA RS-485, RS-422

Connector: DB25 female

Signal: RS-485:485+, 485-, GND
RS-422:TXD+, TXD-, RXD+, RXD-, GND

Baud Rate: 0~115.2Kbps

Work mode: DCE

Synchronous serial, lucency transmission

600W surge protection, 15KV ESD protection

Environment, Power and Dimension

Working temperature: -25 to 70°C

Storage temperature: -40 to 85°C

Humidity: Relative humidity 5% to 95%

Input power: 220VAC or -48VDC

Consumption: 2W

Power protection: From high voltage/short circuit

L×W×H: 227.4mm×146.3mm×42.7mm

Shell: Plastic

Weight: 260g

Warranty: 3 years

Certifications:

Shenzhen 3onedata Technology Co.,Ltd

Tel: +86-755-26702688 Fax: +86-755-26703485

www.3onedata.com