

# IT-E232-PC

RS232 to E1 Converter User Manual

#### Introduction:

IT-E232-PC interface converter supports the conversion between E1 interface which accord with the ITU-T G703 standard and RS-232 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:**

IT-E232-PC is shipped with following items.

1. IT-E232-PC ×1

2. 220V power line ×1

3. DB25 male to DB9 female cable  $\times 1$ 

4. User manual ×1

#### Features:

- 1. Convert RS232 interface 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 1200hm (RJ-45) and 750hm (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

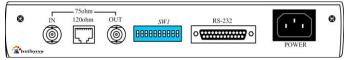
AIS Upriver E1 line alarm indicator light

ERR E1 line cut alarm indicator light.

**TD** Receive data indicator light from G703 network, bright as having data receive

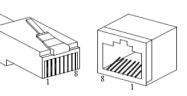
**RD** Send data indicator light from G.703 network, bright as having data receive

## 2. The product back panel sketch map:



POWER 220VAC input ON/OFF power switch Rx/75 ohm E1-75Ω input TX/75 ohm E1-75Ω output RS-232 interface (input and output)

Definition of balanced Twisted Pair (120 ohm) wire sequence for RJ45 interface and RS232 interface: 1.  $120\Omega/RJ45$  PIN define



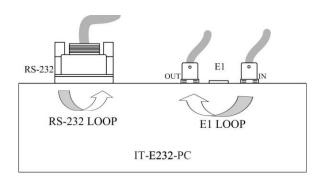
NO.	Function define	I/O
1	NC(null)	
2	RX+( receive data +)	Input
3	RX-(receive data -)	Input
4	GND(ground)	
5	GND(ground)	
6	TX+ (send data+-)	Output
7	TX- (send data -)	Output
8	NC(null)	

#### 2. RS-232 interface define (DB25 interface)

NO.	Function define	I/O
2	TXD	Ι
3	RXD	0
5	CTS	0
6	DSR	0
7	GND	
8	DCD	0

# DIP switch setup (Function setup switch SW1):

1. Impedance setup (NO.1)			
OFF: 1200hm ON: 750hm			
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)			
OFF internal clock			
ON line, resume clock			
4. Loop setup			
NO.8 OFF no-loop ON E1 port loop			
NO.9 OFF no-loop ON RS-232 port loop			



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:**





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## **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-232 port

Standards Compliance: EIA RS-232C Interface Types: RS-232(DB25 female) Signal: TXD, RXD, CTS, DSR, GND, DCD

Baud Rate: 0~115.2Kbps

Work mode: DCE

Asynchronous serial, fluency transmission

600W surge protection, 15KV ESD protection

**Environment, Power and Dimension** 

Working temperature: -25 to 70°C

Storage temperature: -40 to 85°C