MODEL7211A

10/100M Ethernet to E1 Bridge User Manual

Introduction:

MODEL7211A bridge provides easy conversion from ITU-T G.703 E1 channel to Ethernet interface. Can used widely in connecting between WAN and LAN, monitoring, etc. The Ethernet interface is 10/100Mbps auto negotiation and can be full/half duplex. The E1 is transparent and in full rate, which can support the E1 unframed mode, including fractional E1 per request. A pair of MODEL7211A offer a cost effective solution for using existing E1 leased lines for transparent Ethernet service. Local management of the MODEL7211A Converter is provided via DIP switches. Front panel LEDs monitor the G.703 link, Ethernet LAN and serial ports for status and Loss of Sync. MODEL7211A converts the G.703 interface to a user-oriented 10/100BaseT(x) interface for data transmission.

Packing List:

MODEL7211A is shipped with following items.

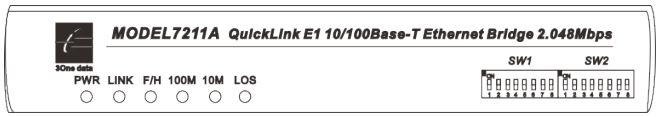
1. MODEL7211A × 1
2. 220V power line × 1
3. User manual × 1

Features:

1. Using E1 line transparent transfer Ethernet data
2. E1(G.703)interface support 120ohm(RJ-45)and 75ohm（BNC double coaxial）
3. Ethernet port support 10M/100M full-duplex/half-duplex
3. Support Internal timepiece and line recover timepiece
4. Support VLAN over length data packet
5. Support Ethernet MAC address filtrate function
6. Support 64Mbit data cache
7. Support power input -48VDC or 220VAC optional

Description on Installation and Panels:

1.The product front panel sketch map:



LED Indicator define:

PWR Power indicator. Brightness if electrify.

LINK Ethernet connection constitute.

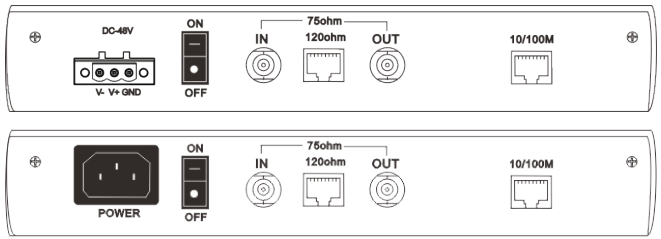
F/H Ethernet Fall/half duplex indicator, bright as full duplex.

100M Ethernet port 100M indication.

10M Ethernet port 10M indication.

LOS E1line cut alarm indicator light

2.The product back panel sketch map:



POWER -48VDC/220VAC input optional

ON/OFF power switch

120 ohm：E1-120Ω(input and output)

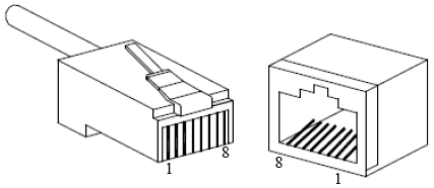
Rx/75 ohm E1-75Ω input

Tx/75 ohm E1-75Ω output

10/100M Ethernet interface(input and output)

Definition of balanced Twisted Pair(120 ohm) wire sequence for E1 and Ethernet interface:

1. Ethernet RJ-45 interface define



NO.	Function define	I/O
1	TX+ (send data +)	output
2	TX- (send data -)	output
3	RX+(receive data +)	input
4	NC(null)	
5	NC(null)	
6	RX-(receive data -)	input
7、8	NC(null)	

2. E1 interface 120Ω/RJ-45 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)	

3.DIP switch setup:

1. Function setup switch SW1

Impedance setup

NO.1	NO.2	NO.3
ON	ON	ON: 75 ohm
OFF	OFF	OFF: 120 ohm

Ethernet working mode setup

NO.4	NO.5	NO.6	Ethernet mode
OFF	OFF	OFF	10M/100M, Fall/half duplex
OFF	OFF	ON	10M/100M half duplex
OFF	ON	OFF	Fall/half duplex 10M
OFF	ON	ON	10M, half duplex
ON	OFF	OFF	100M, full duplex
ON	OFF	ON	100M, half duplex
ON	ON	OFF	10M, full duplex
ON	ON	ON	10M, half duplex

Timepiece setup

NO.7	NO.8
ON	OFF : Internal timepiece (timepiece from 7211 panel)
OFF	OFF : Line Recover timepiece (timepiece from E1 port)

2. Function switch setup SW2

NO.1	ANA local simulation loop setup switch
NO.2	Reserve
NO.3	Reserve
NO.4	Reserve

Factory settings (SW1 and SW2):

Factory settings of the product are G.703 interface 75 ω, line recovered clock, SW1-1, SW1-2, SW1-3 are ON and the remaining members are OFF , _DIP switch SW2 is OFF.

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

CRC checkout: no

Port coding: HDB3

Port transmission: 2KM

Port protection: 1500V electromagnetism isolate

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

Ethernet port

Interface Types: 10/100BaseT, full/half duplex

Standards Compliance: IEEE 802.3

Bit Rate: 10/100BaseT limited to Max 2.048 Mbps

Connectors: RJ45 (10/100 Base-T Electrical)

Line code: Manchester Encoding

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: 5 years

Certifications:

3onedata

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