



# MODEL7210

10/100M Ethernet to 4×E1 Bridge

## Introduction:

The MODEL7210 inverse multiplexers transmit up to 8 Mbps channel over multiple E1 links. They bridge the gap between E1 and E3, allowing bridges and routers to operate at their fastest rates. The MODEL7210 has a built-in 10/100 Ethernet bridge with VLAN support for LAN-to-LAN applications over 4 E1 links. The MODEL7210 fully meets all of the E1 specifications including G.703, G.704. The unit features diagnostic capabilities for performing remote loopback tests.

## Packing List:

MODEL7210 is shipped with following items.

1. MODEL7210 × 1
2. 220V power line × 1
3. User manual × 1

## Features:

1. Using 4 E1 line transparent transfer Ethernet data
2. Support pretend random coding loop test
3. E1(G.703)interface support 120ohm(RJ-45)and 75ohm(BNC double coaxial)
4. Ethernet port support 10M/100M full-duplex/half-duplex
5. 1U, 19 inch RACK

## Description on Installation and Panels:

### 1. Front panel sketch map:



### LED Indicator define:

**PWR** Power indicator. Brightness if electrify.

**LINK** Ethernet connection constitute.

**DUP** Ethernet Full/half duplex indicator, bright as full duplex.

**100M/ACT** Ether net port 100M indication.

**10M/ACT** Ethernet port 10M indication.

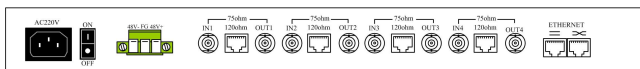
**WORK** E1 working indication

**LOS** E1 signal lose indication

**TEST7210** test state indication

**PTOK** Fake random test succeed indication.

## 2. Back panel sketch map:



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

**ON/OFF** power switch

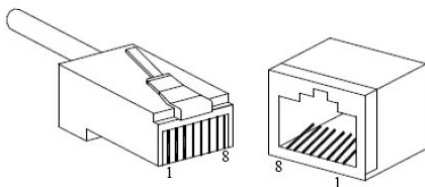
**Rx/75 ohm** E1-75Ω input

**Tx/75 ohm** E1-75Ω output

**Notice:** Rx/75 ohm BNC-1 and Tx/75 Ohm BNC-1 make up of the  
1 E1 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)	

Connect PC use cross-over cable

Connect HUB/SWITCH straight-through cable.

## 2. E1 interface 120 $\Omega$ /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)	

### DIP switch setup:

There have a range of DIP switch in the 7210 panel, SW1 for function setup, SW2 for Ethernet mode setup.

### 1. Function setup switch SW1

#### Ethernet mode choice

NO.1	NO.2	NO.3	Ethernet mode
OFF	OFF	OFF	10/100M, full/half duplex auto-negotiation
OFF	ON	OFF	10/100M auto-negotiation half duplex
OFF	OFF	ON	10M, full/half duplex auto-negotiation
OFF	ON	ON	10M, half duplex
ON	OFF	OFF	100M, full duplex
ON	ON	OFF	100M, half duplex
ON	OFF	ON	10M, full duplex
ON	ON	ON	10M, half duplex

#### Timepiece choice (NO.4)

ON	Local timepiece
OFF	Resume timepiece

## 2. Function setup switch SW2

### Loop for E1 port (NO.1)

ON Startup loop test

OFF Close loop test

### Loop for local or remote

ON E1 port supply loop to remote

OFF E1 port supply loop to local

### Loop or test interface choice

NO.3 NO.4

ON ON choice NO.1 E1

OFF ON choice NO.2 E1

ON OFF choice NO.3 E1

OFF OFF choice NO.4E1

## 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:  $2.048\text{Mbps} \times 4 = 8.192\text{Mbps}$

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(support VLAN)

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

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

Line code: Manchester Encoding

Connect line: Connect PC with cross-over

Connect HUB/SWITCH with straight-through

## 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

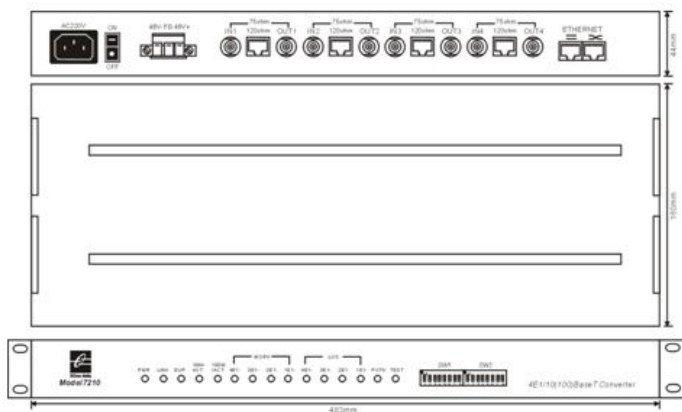
Consumption: 2W

L×W×H: 483mm×160mm×44mm

Weight: 460g

**Warranty: 5 years**

## Dimension:



## Certifications:



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