### **TEAMLINK FABIO 1CX**

#### **Features:**

- ❖ TEAMLINK FABIO-1CX converts ITU-T V.21/V.23 Two / Four wire signals to E1 format via a G.703 interface.
- ❖ V.21 Interface or modem interface Selectable 2 wire or 4 Wire Mode
- ❖ V.21 Signal Monitoring and Indication for Both the 2 Wire and 4 Wire
- Two V.21 Ports for connecting the Axle counters point to Point
- ❖ Four positional Free contacts for sending the E1 UP DOWN, Copper UP and DOWN for Both the V.21 channels.
- \* Realtime Clock setting for Monitoring the Signals and creating the Log File for the E1 UP and DOWN events as well as Copper UP and DOWN Events.
- \* transport of full-duplex voice band analog modem signals.
- ❖ Automatic change over of the data traffic between two axle counters if the E1 Link between the Axle counter fails then will switch over to the copper automatically.
- ❖ If the Power to the Converter Fails then It also Automatically changes the data transportation over the copper link.
- Checking the Bypass link or copper Link and Indicating the Link status
- ❖ E1 Link status monitoring.
- ❖ Potential Free contacts for indicating the events E1 Link UP, E1 Link DOWN, V.21 Signal UP and DOWN between two axle counters.
- ❖ Mobile number can be preprogrammed to send the SMS alerts to the External GSM modem.
- Ordering time options for 24 VDC or 48 VDC power supply.

## **Technical Specifications**

## **G703 E1 Interface Specifications:**

♣ Interface : E1 Interface (4 wire) as per CCITT G.703, G.704

❖ Framing : As Per ITU-T G.703 and G.704 Framed and Unframed
 Operation (Supports PCM31 and PCM30 with the CRC

E 11 1D' 11 0 (' )

Enable and Disable Operation)

❖ Line Code : HDB3

❖ Speed : 2.048 Mbps (n\*64), N=1 to 32)

❖ Impedance : 120 Ohms (Balanced), Optional: 75 Ohms (Unbalanced)

❖ CRC : CRC-4 Generation and Checking

❖ Transmit Clock Mode : Internal clock or G.703 Recovered clock/Recovered from line

❖ Connector : RJ45

# V.21/V.23 Ports Specifications:

- ❖ Interface type: 2/4 wire analog voice band interface. 600-ohm characteristic impedance. Transformer coupled. (At ordering time, specify whether TEAMLINK FABIO 1CX is to be connected to a user device with ITU-T
- ❖ V.21 communication interface, or to a user device with ITU-T V.23 communication interface.)
- ❖ Connector: RJ45 / Terminal Block Ordering Time Option

### **Copper Interface**

❖ Interface type: 2-wire / 4 wire Analog voice band interfaces. 600 ohms. Transformer coupled.

Connector: RJ45

#### **Potential Free Contacts**

- ❖ The Device will Facilitates the E1 Link DOWN E1 LINK UP alarm
- ❖ Bypass Link Monitoring or Copper Link Monitoring.
- ❖ Current Passing through the Relay contacts is 100milli amps with the 48V DC

# **E1 Interface Error Monitoring.**

**❖** Monitors the Code Violations, CRC errors, If the Error Rate increases the threshold values then the device will automatically switch to the copper Link or Quad interface.

## **EVENT LOG:**

- ❖ TEAMLINK FABIO-1CX will records the events Link E1 UP, E1 DOWN, QUAD UP, QUAD down conditions in the flash so the even the Power Goes off also we can monitor the events after the Power comes.
- ❖ Changing the RTC clock timing is using the menu driven program.
- ❖ E1 Line Error Rate Monitoring Log.
- ❖ The Device will send the SMS alerts through the External GSM modem which is connected to the DB9 connector Provided on the back side of the unit

## **CLOCKING MODES:**

- ❖ E1 Recovered clock: The Device will recover the clock from the E1 which is connected to the STM
- Local clock: The Unit will use the local oscillator clock for the data recovery and transmitting over the E1

## **LED INDICATORS:**

- ❖ Power, E1 UP, E1 DOWN, COPPER UP, COPPER DOWN, 2/4 Wire Mode
- ❖ V.21 working Line status, E1 ERROR status



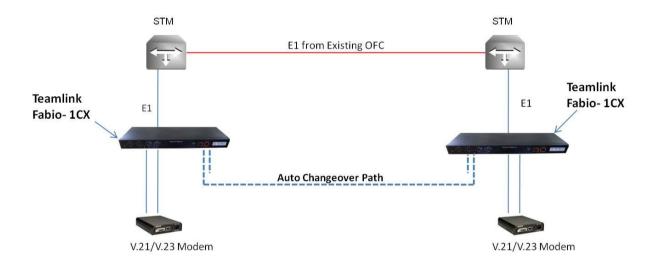
# **Power Supply:**

Ordering option for 48 VDC or 24 VDC

### **Environment**

❖ Operating Temperature : 0 to 70°C
❖ Operating Humidity : 0% to 85%

### APPLICATION DIAGRAM



Auto Changeover feature Enables Digital Axle Counter to be get connected with redundant Quad Cable path in case of **OFC or E1** Link failure using **Teamlink Fabio-1CX** 



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