# Synergy Telecom P Ltd.

# XG2128 E1 BER Tester

XG2128 E1 BER tester is such a small and multi-functional handheld E1 line test instrument, specially designed for E1 PCM line access, maintenance, checking and acceptance. It provides BER test, alarm analysis, signaling analysis etc.. It can be extensively used in R&D, production, installation and maintenance of SDH, PDH, PCM, Data Protocol Converter. It is a useful tool for faster problem solution.

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### **Basic Functions**

- 120Ω and 75Ω line interfaces
- HDB3 and AMI line codes
- Out-of-service framed and unframed testing
  - ✓ 2Mb/s, N¡64Kb/s BER testing
  - ✓ Frame data and alarm monitoring
  - ✓ Clock slip measurement
- Frequency and level measurement
- Clock source: Internal, Interface
- Testing pattern: PRBS, Fix Code, 16-BIT User Word
- Error insertion: Single and Fixed Rate
- Real-time transmit circuit status indication: open/short
- · Manual and auto-timer measurement
- Performance analysis according to G.821, G.826, and M.2100
- Test results uploaded, conserved and printed by TestManagerPro software

### **Option**

- In-service framed and unframed testing
  - ✓ Hi-Z and through mode testing
  - ✓ CODE, FAS, CRC4, E-BIT BER testing
  - ✓ Frame data and timeslot activity monitoring
  - ✓ CAS and CCS signaling monitoring

### Main Features

- Handheld and smart designed for easy-to-use
- High resolution backlight LCD
- Smart navigation mode display
- Self-check and keyboard testing function
- Extensive error and alarm generation, detection and indication
- Analysis of alarm and error events in histogram
- Up to 99 days; continuous test performance
- Save/Recall of up to 7 user-defined configurations and 10 groups of results
- Up to 8 hours; working from a single battery charge
- Built-in Li rechargeable batteries and smart charger circuit

ltem	QTY	Item	QTY
XG2128 E1 BER Tester	1	TestManagerPro ( CD )	1
AC Power Adaptor	1	Waterproof Package	1
75 ohm Unbalanced Test Cable	2	User¡s Manual	1
120 ohm Balanced Test Cable	1	Quality Certificate Card	1
USB Communication Cable	1	Maintenance Card	1
Rechargeable Li Battery	1	Packing List	1

 Test results uploaded, conserved and printed by TestManager software via a USB interface connected to PC

## **Configurations**

### **Specifications**

Item	Description
Internal Clock	2048Kb/s i 10ppm
Line Interfaces	75Ω (Unbalanced), 120Ω (Balanced); *High Input Impedance >2KΩ
Line Code	HDB3, AMI
Frame Type	Unframed, PCM30, PCM30CRC, PCM31, PCM31CRC
Level Measurement	-43dB $\sim$ -2.5dB
Tx Clock Source	Internal, Interface

Frequency Measurement	Accuracy: ¡1Hz		
Offset Measurement	Accuracy: ¡1ppm Range: -999ppm~+999ppm		
Test Patterns	PRBS	2 <sup>23</sup> -1, 2 <sup>15</sup> -1, 2 <sup>11</sup> -1, 2 <sup>9</sup> -1	
	Fixed Code	1111, 0000, 1010	
	16-BIT	User Programmable Word	
Alarm Indications	Signal Loss, AIS, Frame Loss, MFrame loss, Pattern Loss, Remote Alarm, Errors, Low Battery		
Frank Indontion	Type: BIT, FAS, CODE, CRC4, E-BIT		
Error Insertion	Single, OFF, Fixed Rate: 10-2, 10-3, 10-4, 10-5, 10-6, 10-7		
Performance Analysis	ITU-T G.821, G.826 and M.2100		
Serial Port	USB Connector		
Rechargeable Batteries	7.4V Li battery, continuous working for 8 hours		
Recharging Time	Approx. 2 hours		
Dower aupply	Input: 100V ~ 240VAC, 50/60Hz		
Power supply	Output: 12VDC /1.5A		
TestManagerPro	Operating System: WIN98/ME/2000/NT/XP		
Dimensions	L¡W¡H 230mm¡72/116mm¡33mm		
Weight	Approx.0.5kg		

Remark: \* means option