HCT-BERT/C

E1/Datacom BER Tester

The HCT-BERT/C tester is a compact, color-LCD, graphic-user-interface, single hand E1 Bit error rate tester designed for field use in analysis and maintenance of data communications (V.35, RS530, X.21, RS232) and E1 (2.048Mbps) lines. The HCT-BERT/C performs framed, unframed drop and insert Nx64Kbps, or nx56Kbps data into any time slot. The HCT-BERT/C tester also provides a variety of E1 line statuses, transmission performance testing (BERT) and monitoring. On the E1 line, the HCT-BERT/C may be used as a generator or receiver.

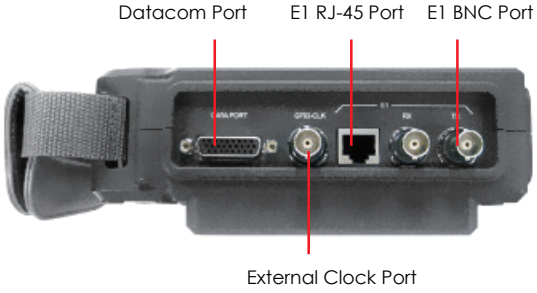
Features

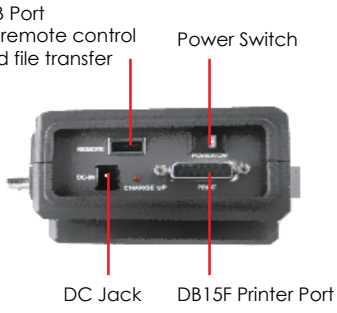
- Color LCD display graphic mode
- USB port for remote control
- Results Report
- Supports G.821/826, M.2100 BERT analysis
- Sa bits setup and monitor
- Internal Memory storage of test result; Direct display on LCD screen
- Print out via Parallel Printer port
- Portable for field use
- Upgradeable for advanced features
- Rechargeable battery with battery low indicator
- Supports CRC & BPV performance analysis
- Datacom BERT analysis available for V.35, RS-530, X.21 and RS-449
- V.35/ V.24/RS-232/449/530/ X.21

Specifications

E1 interface	E1 Receiving Interface
	• Line code: HDB3/AMI • Pulse feature: ITU G.703 • Jitter tolerance: ITU G.823 • Input port: BNC (non-balance), RJ45 (balanced) • Input mode: Impedance: 75ohm (unbalanced), 120ohm (balanced) • Bridging mode: impedance > 1000 ohm
	E1 Transmission Interface
	• Line code: HDB3/AMI • Pulse shape: ITU G.703 • Pulse amplitude: Nominal 2.37V for BNC 75 ohm Nominal 3.00V for RJ45 120 ohm • Zero amplitude: ±0.1 V at max • Jitter tolerance: ITU G.823 • Output port model: BNC (non-balanced), RJ45 (balanced) • Source of clock transmission: Internal clock: 2.048 MHz ±50ppm, ±100ppm. External clock: receive clock from external clock interface Recovery clock: take clock from received E1 Signal
	E1 Frame Format
	• PCM31, PCM31+CRC, PCM30, PCM30+CRC • Unframed mode, Automatic detection
Other Functions	Color Display Screen: Character/graphic mode
	Test Results Report
	• 100 test results max available in storage • Direct display on LCD screen • Print via printer port available
	Modular Design for Easy Update

Error Rate Test (BERT Test)	BERT Patterns
	• 511, 2047, 2E15-1, 2E15-1 (reverse), 2E20-1, 2E20-1 (reverse), QRSS, 2E23-1, 2E23-1 (inverted), all 1, all 0, alternate, 1100, 3 IN 24, 1 IN 16, 1 IN 8, 1 IN 4, User programmable 1/2/3
	BERT Display Format
	• Error counting, Alarm counting, ITU G.821, ITU G.826 • M.2100, Histogram
	BERT Transmission Error Rate
	• Insert one forced error • Fixed error rate of 10-3~10-7
	Quality Analysis
	• Receiving seconds, Error seconds, Alarm seconds • Error Free seconds, Error rate, Valid seconds • Severely error seconds, G.821 error seconds • G.826 error seconds, Unavailable seconds
	Data Port BERT Test
	• Data rate of the multiple of 64Kbps: N*64Kbps (N=1~36)
Indications	LEDs (DTE, DCE, DATA PORT, TD, RD, DCD, RTS, CTS, DTR, DSR, TC, RC XTC)
Certification	CE
Power Input	AC100 ~ 240V Adapter to DC 9V 2A
Dimensions	179 x 134 x 68 mm (D x W x H)
Weight	0.8kg
Temperature	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)
Humidity	10 ~ 90% non-condensing
MTBF	35,000 hrs





Ordering Information

Model Name	Description
HCT-BERT/C	E1 / Datacom analyzer

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.