

# BER 通信线缆测试仪

**A BER communications line quality tester for your Laptop, Notebook or PC**

**BER 通信线缆测试仪，适用于笔记本及台式机**

## 主要特点

- Complete set of BERT (Bit Error Rate Test) line test patterns
- BER testing from your laptop, notebook or PC using a durable USB adapter
- Supported on Windows 8, 7, Vista and XP
- Line speeds from 15 baud to 2 Mbits/s
- Tests synchronous and asynchronous lines in loopback and point-to-point configurations
- Connects to RS232, V.35, RS530, RS422, X.21, RS449 and RS485 network interfaces
- Tests operation with NRZ, NRZI, FM0, FM1, Manchester Encoding and Conditioned Di-phase line signaling
- LabVIEW and Windows APIs for test management
- User controlled error injection facility
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- 全面的 BERT(误码率测试)线缆参数测试
- USB 适配器，适用于笔记本及台式机
- 支持 Windows 8, Windows 7, Vista 及 XP
- 速率范围 15 baud 至 1Mbits/s
- 支持同步或异步 环回及点对点测试
- 接口支持 RS232, V.35, RS530, RS422, X.21, RS449 及 RS485
- 支持 NRZ, NRZI, FM0, FM1, Manchester 编码及 Di-phase 调制信号
- 提供 LabVIEW 及 Windows APIs 接口
- 手动误码注入工具

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## Overview

The FarSync BERT provides a comprehensive, simple to use, all in one, line testing utility for testing asynchronous and synchronous lines from your Laptop PC. There are no extra expensive modules to buy to test different line types. All the popular standard BERT test patterns can be selected; the test period can be controlled; real time error counters and full line test statistics are provided as well as support for user controlled error injection.

The FarSync Flex adapter is simply plugged into any of your Laptop's USB ports; select one of the 线缆 s provided to connect to the line to be tested; the BERT application can then be started and the line quality results are displayed in real time.

API access for LabVIEW or Windows applications enables the tests to be run, and the results obtained, programmatically.

Line Monitor software, which includes support for use with Wireshark, is also included in the product. Line Monitor 线缆 s are ordered separately.

## 概览

FarSync BERT 提供了综合性的简单易用的线缆测试工具，可使用笔记本电脑测试进行同步及异步测试。无需为不同类型线缆额外采购昂贵模块。支持全部主流标准的 BERT 测试模式。可控测试时间，实时误码计数，并提供全面的测试数据统计，及误码注入工具。

支持 RS232 (V.24), V.35, RS530 (EIA530), RS422, X.21 (V.11), RS449 及 RS485 (4 wire) 接口线缆，速率范围：15 baud 至 2 Mbits/s.

FarSync Flex 连接至手提电脑 USB 口，选择待测线缆启动测试，可实时显示线缆质量测试结果

提供 LabVIEW 及 Windows API，可通过程序调用运行测试及获取测试结果

## 测试模式

可使用伪随机编码及固定测试编码，支持 ITU 建议测试编码

## 同步连接

ITU-T 兼容伪随机编码，用于同步测试：

- 63:  $2^6-1$  – 最大 5 个连续 0 及 6 个连续 1
- 511:  $2^9-1$  –最大 8 个连续 0 及 9 个连续 1
- 2047:  $2^{11}-1$  –最大 10 个连续 0 及 11 个连续 1
- $2^{15}-1$  –最大 14 个连续 0 及 15 个连续 1
- $2^{20}-1$  –最大 19 个连续 0 及 20 个连续 1
- $2^{23}-1$  –最大 22 个连续 0 及 23 个连续 1
- QRSS:  $2^{20}-1$  –最大 14 个连续 0

同步测试可用固定编码:

- 1:7 (1/8, 1-in-8) – (1000 0000...)

- 1/16 (1:15, 1-in-16) – (1000 0000 0000 0000...)
- 2/8 (2:6, 2-in-8) - (0100 0010...)
- 3/24, 3-in-24 - (0010 0010 0010 0000 0000 0000...)
- MK – 全 1
- SP – 全 0
- 1:1 – 交替 1 及 0
- FOX (参考 ITU R.52 定义)

### 异步连接

可测试 5, 6, 7 及 8bit 异步连接。建议使用下列测试编码：

- 63:  $2^6-1$
- 511:  $2^9-1$
- 2047:  $2^{11}-1$
- FOX

#### Order Information

#### 订购信息

Name	Description	Product
名称	描述	Code 产品号

#### Complete Product

#### 完整产品

**FarSync** **USB** USB BERT(误码率)同步异步线缆测试仪，支持 X.21, RS232, V.35, FS4105  
**BERT 测试仪** RS422, RS485 (4 wire) 及 RS530 接口。产品包括：

- FarSync Flex v2 - USB 适配器
- BERT Tester – 软件包，支持 Windows 8, 7, Vista, XP
- KCR1 - RS232, RS422 及 RS530 DTE (DB25M) 线缆
- UCX1 - X.21 DTE (DB15M) 线缆
- UCV1 - V.35 DTE (M34M) 线缆
- 自检环回线缆
- Line Monitor 软件
- API 文档

备注

不包括手提电脑

BERT 需使用 USB 2.0 或 3.0 接口

Line Monitor 软件需要配合专用线缆使用以监控双向数据通信。订购信息如下。

线缆		
<b>KC449</b>	RS449 DTE, DB37M 接头, 1.5m	FS6019
<b>KCR1-DCE</b>	RS232 (V.24) - RS530 (RS422) DCE 线缆, DB25F 接头, 2m	FS6070
<b>UCX1-DCE</b>	Single X.21 (V.11) DCE 线缆, DB15F 接头, 2m	FS6075
<b>KCR-MON</b>	Line Monitor 线缆, RS232 (V.24) - RS530 (RS422), DB25M - DB25F	FS6016
<b>KCX-MON</b>	Line Monitor 线缆 X.21 (V.11), DB15M - DB15F	FS6017