

QBERT™

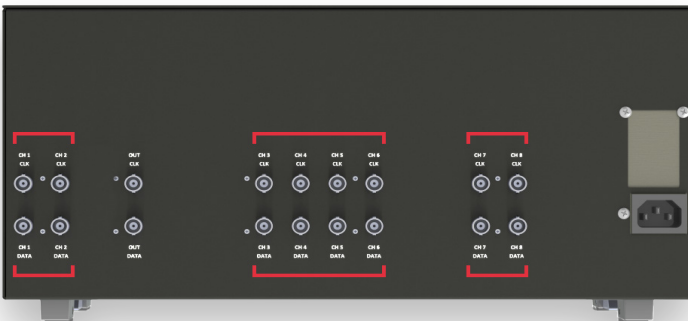


Next-Generation Bit Error Rate Testing

Verify your system configuration and performance with the Quasonix QBERT™. Its portability and simplicity make it an ideal replacement for aging test equipment. Its high-performance BERT core makes it the BERT of the future. Quasonix is... Reinventing Telemetry™.

Advanced Bit Error Rate Tester – Built around the same BERT core used in the Quasonix Receiver Analyzer, QBERT is capable of obtaining pattern sync at extremely high bit error rates, up to $3.8e-1$. More importantly, it can maintain pattern sync at equal or higher levels, exceeding $4.9e-1$ with PN31 patterns. This remarkable performance permits accurate measurements in the harshest of channel conditions. At lower bit error rates, BERT pattern sync is essentially instantaneous, so you know all the errors counted are from your system, not your BERT.

Internal Pattern Generator – Includes all standard pseudo-noise (PN) patterns and user patterns up to 32 bits. For test purposes, it can insert errors manually or at a user-programmed error rate.



Up to 8 simultaneous channels in one chassis.

Automatic DQE Stream Processing – QBERT can automatically recognize Data Quality Encapsulation when in use and can report the detected DQE frame size.

DQE/DQM-Based Testing – Compare DQM error estimation against measured results, or use calibrated DQM rather than bit error rate measurements for actual mission data.

Simple User Interface – QBERT provides an intuitive touchscreen interface that places all functionality on-screen for simple one-touch operation. Measurements and indicators respond in real time, so there is instant correlation with system behavior.

Versatile Deployment – The QBERT chassis is sized to fit standard 19-inch rack-mounting (using provided adapter brackets). An optional portable case can be used to mount and transport the QBERT. The case can fully enclose the unit, while also allowing the front and back of the QBERT to be accessed in the field. The case itself is lightweight, rugged, and can be carried with an included shoulder strap.

QBERT is backed by lifetime software updates and Quasonix's legendary technical support.

QBERT Specifications

Pattern Generator/BERT

Clock and Data In/Out	External user data: TTL on BNC connectors Patterns: Mark (all 1s), Space (all 0s), PN6, PN9, PN11, PN15, PN17, PN20, PN23, PN31, USER (2 to 32 bits) Manual error insertion Continuous random error insertion, BER 1e-9 to 5e-1	
Bit Rates	0.001 Mbps to 50 Mbps	
BERT Functions	Elapsed time, bit rate, total bits Error rate, error count, errored seconds, link availability Pattern sync, clock sync, pattern inversion, clock inversion	
BERT Sync	Sync time at low BER (less than 1e-3): ~ 0 bits Sync acquisition level (BER): PN6 – 3.4e-1 PN9 – 3.5e-1 PN11 – 3.6e-1 PN15 – 3.7e-1 PN17 – 3.8 e-1 PN20 – 3.4e-1 PN23 – 3.1e-1 PN31 – 2.4e-1	Sync loss level (BER): PN6 – 3.4e-1 PN9 – 3.5e-1 PN11 – 3.6e-1 PN15 – 3.7e-1 PN17 – 3.8 e-1 PN20 – 4.0e-1 PN23 – 4.4e-1 PN31 – greater than 4.9e-1

Environmental

Operating Temperature	0°C to +50°C
Storage Temperature	0°C to +70°C
Operating Humidity	0 to 95% (non-condensing)

Physical

Size	Base unit (includes rear-panel feet): 15.13" wide, 6.97" tall (4U), 10" deep <ul style="list-style-type: none"> Removable kick feet for bottom of unit add 0.6" to height Provided adapter brackets allow installation in standard 19" rack Optional portable case available
Screen	10.1" Capacitive Touch
Power	100 to 240 VAC, 50/60 Hz



All Quasonix products are under U.S. Dept. of Commerce jurisdiction. Receiver products are categorized as 5A991.
 ISO 9001:2015 Certified | Specifications subject to change without notice.

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