PRODUCT OVERVIEW

The Flashpistol® PX-Q4XX series of tracer sources are designed to inject modulated tracer light into a fiber for use with all Photonix Flashpistol® or Flashfinder™ leak detection probes or fiber identifiers with 2kHz detection capability. The tracer sources are available as individual units or in kit form when paired with leak detection probes. Contact Photonix Technologies at the number below for additional kit details.

MADE IN U. S. A.

US PATENT 7,826,043B1 AND PATENTS PENDING

PX-Q403

PX-Q410

FEATURES

- Full two year warranty
- ST, SC, or FC output ports
- Temperature stabilized operation
- Interchangeable standard batteries
- Rechargeable NiMH, Alkaline, or AC operation
- Durable construction

APPLICATIONS

- Tracer tone injection for leak detection probes
- Tracer tone injection for fiber identifiers

PX-Q404

PX-Q424

PX-Q434

Photonix Technologies, Inc. , 48 Washington Avenue, Endicott, NY 13760
Phone: 1-800-404-5868 , Fax: 607-786-4603
WWW: http://www.fiber.cc

SPECIFICATIONS

Parameter					
Model	PX-Q403	PX-Q404	PX-Q410	PX-Q424	PX-Q434
Emitter	Laser, FP, Class 1	Laser, FP, Class 1	Laser, DFB, Class 1M	Laser, FP, Class 1	Laser, FP, Class 2
Wavelength	1550nm	1550nm	1550nm	1550nm	1550nm / 650nm
Bandwidth	5nm	5nm	5nm	5nm	5nm / 5nm
Power (peak, max)	+1dBm	+5dBm	+15dBm	+5dBm, +5dBm	+5dBm, 0dBm
Modulation	2kHz	2kHz	2kHz	2kHz	2kHz / 3Hz
EST Dynamic Range*	76dB	80dB	90dB	80-83dB	80-83dB
Operating Temperature	-5C to 50C	-5C to 50C	-5C to 50C	-5C to 50C	-5C to 50C
Storage Temperature	-10C to 60C	-10C to 60C	-10C to 60C	-10C to 60C	-10C to 60C
Battery	4-AA NiMH	4-AA NiMH	8-D NiMH	4-AA NiMH	4-AA NiMH
Battery Life (min)	14hr	14hr	9hr	12hr	12hr

ORDERING INFORMATION

PX-Q4XX Flashpistol® Tracer Sources

Model	Description
PX-Q403	Single +1dBm 1550nm Tracer Source for Flashpistol* Probes
PX-Q404	Single +5dBm 1550nm Tracer Source for Flashpistol* Probes
PX-Q410	Single +15dBm 1550nm Tracer Source for Flashpistol* Probes
PX-Q424	Dual +5dBm 1550nm Tracer Source for Flashpistol* Probes
PX-Q434	Dual +5dBm, 1550nm / 0dBm, 650nm Tracer

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ENHANCED PRODUCT OVERVIEW

Tracer signal injection for leak detection probes

When troubleshooting fiber optic systems, it is often necessary to identify fibers or places where light is being lost from a fiber. Optical test sets and OTDRs are useful in finding the amount of loss or general loss locations, but to actually pinpoint a fault, a visible laser source has traditionally been the instrument of choice.

Visible laser sources inject red light into a fiber. Any red light that is visible indicates the fiber being tested, loss points, or breaks. The problems with visible lasers however are that they have a range of only a few miles, do not work with more opaque buffer colors (black, blue, green, etc.), and are not visible in well lit areas.

The Flashpistol® and Flashfinder™ leak detection probes are designed to sense light three different ways but their most powerful mode of operation is 2kHz tracer tone detection. This is the mode in which the probes search for light which has been remotely injected by the PX-Q4XX series tracer sources.

The “2kHz Tracer” indicator at the rear of the Flashpistol® and Flashfinder™ probes will illuminate when the probe is sensing a 2kHz modulated signal from PX-Q4XX remote tracer sources. The combined purpose of the probe and tracer source is to examine ports, fibers, splices or connectors for the presence of a 2kHz IR tracer light. This allows identification of light at uncovered ports up to 300km away or to locate severe bends / breaks in most 250 or 900um buffered fibers. This mode works throughout the length of a fiber link as well as at the ends.

Tracer signal injection for fiber identifiers

Similar to the Flashpistol® and Flashfinder™ leak detection probes, fiber identifiers generally search for 2kHz tracer tones as well. Unlike leak detection probes, fiber identifiers physically bend a fiber to extract signal for diagnosis.

The PX-Q4XX series tracer sources work well with fiber identifiers and depending upon the model of source used, can extend the usable dynamic testing range of fiber identifiers by up to 10-20dB thereby extending usable distances by 10-100X their normal value. This is particularly significant when testing dark buffered fibers where buffer attenuation can be over 10 dB greater than white or clear buffers.

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