





# كافعانت المائية

د امارتی شرکتونو لوی ریاست
د افغان تیلی کام مخابراتی امارتی شرکت لوی ریاست
د مالیی کام او اداری میاونیی ت
د تیدارکی او اداری میاونی ت
د تیدارکی میاونی ت
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د تیدارکی میاونی ت
د تیدارکی او اجناسو پیرودلو مدیریت

(موضوع: تهیه و تدارک 10 پایه ماشین OTDR برای تطبیق پروژه FTTH در زونهای ولایات)

شماره درخواست نرخدهی: {97} تاریخ صدور درخواست نرخدهی به قمری: {1447/1/12 } تاریخ صدور درخواست نرخدهی به شمسی: {17 /1404}

جنس فوق ضرورت : معاونيت عملياتي سيمدار (مديريت عمومي حفظ و مراقبت فكس لاين زونهاى ولايات)

تاريخ ترتيب استعلام : ( 12 / 1 / 1447 )

- (1) اداره (نام اداره تدارکاتی را درج کنید) تخصیص بودجه لازم برای تدارک اجناس/ خدمات غیر مشورتی مندرج این درخواست را دارد.
- (2) آفر سربسته شما الى {تاريخ و وقت را درج كنيد} يا قبل ازآن به دفتر {مديريت خريداري امريت تهيه و تداركات شركت افغان تيليكام } تسليم داده شود.
- (3) آفر ها ئیکه بعد از میعاد تسلیمی ارائه گردند، بدون اینکه بازشود مسترد می گردد. پاکت حاوی آفر باید به صورت واضح عبارت نرخ برای (نام اجناس /خدمات غیر مشورتی را درج کنید) نشانی شده باشد.
  - (4) آفر ارائه شده در آفرها باید الی مدت (30) روز تقویمی سر از تاریخ ختم میعاد تسلیمی آفرها اعتبار داشته باشد.
- (5) در صورت تغیر در مقدار نیازمندی، اداره می تواند مقدار نیازمندی تقاضا شده را الی (25) فیصد زیاد و یا کم نماید، مشروط به اینکه قیمت مجموعی آن از حدود صلاحیت پولی برای درخواست نرخ گیری تجاوز ننماید.
- (6) ترجیح داخلی مطابق حکم چهارم طرزالعمل تدارکات قابل اجرا است. {مورد ترجیح داخلی و فیصدی آنرا در ج نمائید}.
- (7) آفر گشائی در محضر عام حتمی نبوده و فرمایش دهنده مکلف به قبول نازلتری<mark>ن</mark> نرخ ن<mark>می باش</mark>د. در صورت رد هر یک یا تمام آفرها فرمایش دهنده کدام مسؤلیت در قبال داوطلب تهیه/ارائه کننده ندارد.
  - (8) آفر دهنده اسناد ذیل را با آفر خویش ضمیمه می نماید:
  - 1- جواز تجارتی/ فعالیت/کار قابل اعتبار؛
    - 2- نمبرتشخيصيه ماليه؛
  - 3- اجازه نامه توليد كننده (در صورت لزوم).
    - -4
  - (9) سند نرخ گیری تکمیل و توسط شخص با صلاحیت یا نماینده تهیه/ ارائه کننده در هر صفحه مهر امضاء شده باشد. نام کار مند صادر کننده در خواست نرخ گیری:

امضاء هنت امضاء هنت

# جدول اقلام و قیمت ها

قمیت مجموعی به افغانی	قیمت فی واحد به افغانی	مقدار	واحد	اسم و تشریح با مشخصات تخنیکی اقلام	شماره
		10	پایه	MaxTester 720C Access OTDR (Wavelength 'nm' 1310, 1550 and 1490 with 1 year warranty	1

#### نوت:

- √ په هره تدارکاتی پروسه کی چی یو شرکت د اړونده نرخ اخیستنی استعلام مطابق د اجناسو، خدماتو او ساختماتی چارو د تهیه او ترسره کولو لپاره ګټونکی وبلل شی او قیمت یی له (100000) سل زره افغانیوڅخه لوړ وی مخکی له دی چی د برنده کی اطلاعیه ترلاسه کړی باید له مجموعی قیمت څخه ٪10 لس فیصده د تضمین په ډول د افغان ټیلی کام مخابراتی امارتی شرکت بانکی حساب ته جمع او اصلی اویز یی د مالی محترم ریاست له تصدیق څخه وروسته د تهیه او تدارکاتو ریاست پیرودلو آمریت ته تسلیم کړی.
- √ که چیرته کوم ګټونکی شرکت دلس فیصده تضمین له ورکولو څخه انکار وکړی شرکت به یی د افغان ټیلی کام مخابراتی امارتی شرکت په تورلیست کی ثبت کیږی او د یوکال لپاره به د افغان ټیلی کام مخابراتی امارتی شرکت دخوش خرید له لاری په تدارکاتی پروسوکی ګډون نه شی کولای.
- ✓ که چیرته د ګټونکی شرکت لخوا غوښتل شوی اجناس/خدمات په وخت سره تهیه او اماده نه شی یعنی شرکت ونه توانیږی چی اجناس/خدمات/ساختمانی چاری تهیه او ترسره کړی دنه تهیه کولو په صورت کی به د شرکت تضمین دیوکال په پار افغان ټیلی کام مخابراتی امارتی شرکت سره پاتی وی او شرکت به یی په تورلیست کی شاملیږی یوکال وروسته به یی بیرته تضمین شرکت ته سپارل کیږی.
  - √ پورته ذکرشوی پریکړی د شاروالی جوازلرونکو لپاره د تطبیق وړ نه دی.

مجموع قیمت به ارقام بشمول مالیات :عدد

مجموع قيمت به حروف بشمول ماليات:

مجموع مبلغ ماليات به ارقام و حروف:

مجموع قیمت به ارقام بدون مالیات: عدد (قاب<mark>ل پر</mark>داخت) 🔝 🗐

مجموع قیمت به حروف بدون مالیات (قابل پرداخت)

مدت ضمانت (ورانتی/گرنتی) بعد از تاریخ اکمال:

مشخصات ضم پیشنهاد می باشد:

# مشخصات تخنيكي اجناس

مشخصات	اقلام	شماره
	شخص شرکت: رس شــــرکت:	آدرس م ایمیل آدر

مشخصات	اقلام	شماره
مهر تهیه/ارائه کننده	ارائه کننده:	اسم تهیه/
	ل يا نماينده با صلاحيت تهيه/ارائه كننده:	اسم شخصر
	خص یا نماینده تهیه/ارائه کننده:	امضای ش
		تاريخ:
	يلفون حتمى:	شماره ت

یادداشت: فرمایش گیرنده کاپی رهنمود، ساخت و مودل، بروشور و یا فهرست تجهیزات یا خدماتی را که اکمال می نماید ضمیمه نماید. معلومات فوق جهت ارزیابی مؤثر آفرها استفاده می گردد.

#### شرایط تدارک و پرداخت

شرایط ذیل صرف با موافقه تحریری فرمایش دهنده قابل تغییر می باشد.

- (1) تهیه کننده مکلف به پرداخت تأمینات و تضمینات می باشد ، تامینات از س<mark>ر جمع</mark> پول <mark>5 الی 15 فیصد اخذ میگردد و بعد از</mark> تکمیل ورانتی به اکانت شرکت انتقال میگردد.
- (2) بعد از اکمال خدمات غیر مشورتی/ تهیه اجناس، تهیه/ارائه کننده باید نسخه اصلی و (2) کاپی بل (Invoice) را به فرمایش دهنده تسلیم نماید؛
- (3) پرداخت توسط فرمایش دهنده، طی مدت (30) روز کاری درمقابل مقدار واقعی اجناس/خدمات غیر مشورتی تهیه شده صورت می گیرد.
  - (4) فرمایش دهنده میتواند در حالات ذیل با ارسال اطلاعیه کتبی به تهیه/ارائه کننده، امر خریداری را کاملاً یا قسماً فسخ نماید:
    - 1- تهیه/ارائه کننده موفق به تحویل بخش یا تمام اجناس در ظرف مدت معینه در امر خریداری نشود؟
      - 2- تهیه /ارائه کننده موفق به اجرای مکلفیت های دیگر تحت امر خریداری نشود.
- 3- هرگاه در اجناس اکمال شده یا خدمات ارائه شده نواقص و یا کاستی ها مشاهده گردد، تهیه/ارائه کننده مکلف به رفع نواقص و کاستی ها در مدت (3) روز کاری بعد از دریافت اطلاعیه در مورد می باشد، در غیر آن فرمایش دهنده می تواند امر خریداری را فسخ نماید.
- 4- هرگاه تهیه/ارائه کننده، در جریان داوطلبی و یا حین اجرای وظایف محوله تحت امر خریداری اقدام به فساد و تقلب نموده باشد.
- (5) هرگاه در درخواست نرخ گیری میعاد ضمانت (وارنتی/گرنتی) تصریح گردیده باشد، تهیه/ارائه کننده مکلف به تعویض در طول مدت معینه می باشد.

#### اصلاح اشتباهات محاسبوى

(1) اشتباهات محاسبوی طور ذیل تصحیح می گردد:

- 1- در صورت تفاوت ميان مبلغ به ارقام و حروف، مبلغ به حروف قابل اعتبار مي باشد؟
- 2- در صور تیکه تفاوت میان قیمت فی واحد و قیمت مجموعی وجود داشته باشد، قیمت فی واحد برای ارزیابی قیمت ها و ترتیب امر خریداری قابل اعتبار می باشد؛
- 3- درصورت موجودیت تفاوت میان نرخ فی واحد و قیمت مجموعی (حاصل ضرب مقدار در نرخ فی واحد)، نرخ فی واحد قابل اعتبار می باشد، هرگاه از نظر فرمایش دهنده اشتباه در نقاط اعشاری در قیمت فی واحد برجسته باشد، در این صورت قیمت مجموعی اقلام طوریکه نرخ داده شده است قابل اعتبار بوده و قیمت فی واحد باید اصلاح شود.
- 4- فرمایش دهنده مطابق مندرجات فوق اشتباهات محاسبوی را اصلاح و بعد از اخذ موافقه کتبی داوطلب در قیمت مجموعی آفر محاسبه می نماید.
- د. داوطلب مکلف به پذیرش اشتباهات محاسبوی در آفر خویش می باشد. در صورت عدم پذیرش اشتباهات محاسبوی توسط داوطلب، آفر وی رد می گردد.

نوت:











MaxTester 720C Access OTDR

OPTIMIZED FOR MULTIMODE AND SINGLEMODE ACCESS NETWORK

CONSTRUCTION AND TROUBLESHOOTING

NEW OTDR

Fully featured, entry-level, dedicated OTDR with tablet-inspired design; perfect for construction, troubleshooting and everyday field testing in any access network.

#### **KEY FEATURES**

Handy, lightweight, powerful, tablet-inspired design

7-inch, outdoor-enhanced touchscreen—the biggest in the handheld industry

12-hour autonomy

Dynamic range of up to 36 dB in singlemode and 29 dB in multimode

Live fiber testing at 1625 nm

iOLM-ready: intelligent and dynamic application that turns complex OTDR trace analysis into a one-touch task

Rugged design built for the outside plant

#### **APPLICATIONS**

Access network construction and troubleshooting

FTTx/PON testing through splitters (up to 1x32)

Central office link certification

Data center and private networks

LAN/WAN characterization

Fronthaul/backhaul (FTTA, FTTT, RRH, DAS and small cells)

# COMPLEMENTARY PRODUCTS AND OPTIONS



Fiber Inspector Probe FIP-400B (WiFi or USB) FastReporter

Data Post-Processing Software FastReporter



Soft Pulse Suppressor Bag SPSB

Lecar a

**EXFO** 

PEC SHEET

### THE HANDHELD OTDR... REINVENTED.

The MaxTester 700B/C Series is the first tablet-inspired OTDR line that is handy, lightweight and rugged enough for any outside plant environment. With a 7-inch, outdoor-enhanced touchscreen—the most efficient handheld display in the industry—it delivers an unprecedented user experience. Its intuitive Windows-like GUI ensures a fast learning curve. Plus, its new and improved OTDR 2 environment offers icon-based functions, instant boot-up, automatic macrobend finders as well as improved auto and real-time modes.

The MaxTester 700B/C Series is a line of genuine high-performance OTDRs from the world's leading manufacturer. It delivers EXFO's tried and true OTDR quality and accuracy along with the best optical performance for right-first-time results, every time.

The amazing 12-hour battery life will never let a technician down, and the plug-and-play hardware options, like the VFL, power meter and USB tools, make every technician's job easier.

Most importantly, the MaxTester 700B/C Series is finally bringing the intelligent Optical Link Mapper (iOLM), an intelligent OTDR-based application, to the handheld market. This advanced software turns even the most complex trace analysis into a simple, one-touch task.

Ultimately, the MaxTester 700B/C Series is small enough to fit in your hand and big enough to fit all your needs!

### THE ENTRY-LEVEL SOLUTION DESIGNED FOR ALL YOUR TESTING NEEDS

The MaxTester 720C OTDR/iOLM features a dynamic range of 36 dB in singlemode and 29 dB in multimode, as well as industry-leading dead zones. This ensures efficient testing of closely spaced events such as patchcords in data centers, or patch panels in central offices (COs). The MaxTester 720C is optimized for point-to-point (P2P) testing of any access network, and is suitable for testing through 1x32 splitters.

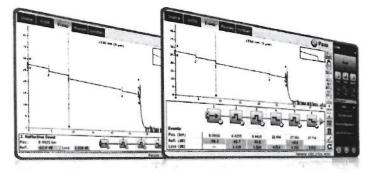
Other models available:

- > MaxTester 715B short access and FTTx last-mile installation and troubleshooting
- > MaxTester 730C FTTH/PON installation and maintenance for testing through optical splitters and P2P metro

#### LOOKING FOR ICON-BASED MAPPING?

# Linear View (Included on All EXFO OTDRs)

Available on our OTDRs since 2006, the linear view simplifies the reading of an OTDR trace by displaying icons in a linear way for each wavelength. This view converts the graph data points obtained from a traditional single pulse trace into reflective, non-reflective or splitter icons. With applied pass/fail thresholds, it becomes easier to pinpoint faults on your link.



This improved version of linear view provides the flexibility to display both the OTDR graph and its linear view without having to toggle to analyze your fiber link.

Although this linear view simplifies the OTDR reading of a single pulse width's trace, the user will still need to set the OTDR parameters. In addition, multiple traces must often be performed in order to fully characterize the fiber links. See the section below to learn how the iOLM can perform this automatically and with more accurate results.





#### **IOLM—REMOVING THE COMPLEXITY FROM OTOR TESTING**

OTDR TESTING COMES WITH ITS LOAD OF CHALLENGES. . .









iOLM | intelligent Op Link Mapper

intelligent Optical

In response to these challenges, EXFO developed a better way to test fiber optics: The iOLM is an OTDR-based application designed to simplify OTDR testing by eliminating the need to configure parameters, and/or analyze and interpret multiple complex OTDR traces. Its advanced algorithms dynamically define the testing parameters, as well as the number of acquisitions that best fit the network under test. By correlating multipulse widths on multiple wavelengths, the iOLM locates and identifies faults with maximum resolution-all at the push of a single button.

### HOW DOES IT WORK?

Dunamic multipulse acquisition



Intelligent trace analysis

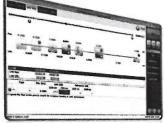


All results combined into a single link view



Comprehensive diagnosis





Turning traditional OTDR testing into clear, automated, first-time-right results for technicians of any skill level.

Patent protection applies to the iOLM, including its proprietary measurement software. EXFO's Universal Interface is protected by US patent 6,612,750.

#### THREE WAYS TO BENEFIT FROM THE IOLM



Run both iOLM and OTDR applications (Oi code)

**UPGRADE** 



Add the iOLM software option to your iOLM-ready unit, even while in the field **IOLM ONLY** 



Order a unit with the iOLM application only

### **IOLM FEATURES VALUE PACK**

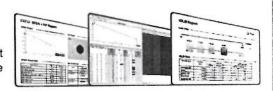
In addition to the standard iOLM feature set, you can select added-value features as part of the Advanced package or standalone options. Please refer to the iOLM specification sheet for the complete and most recent description of these value packs.

# GET THE BEST OUT OF YOUR DATA POST-PROCESSING

FastReporter

# ONE SOFTWARE DOES IT ALL

This powerful reporting software is the perfect complement to your OTDR, and can be used to create and customize reports to fully address your needs.







FREE TRIAL

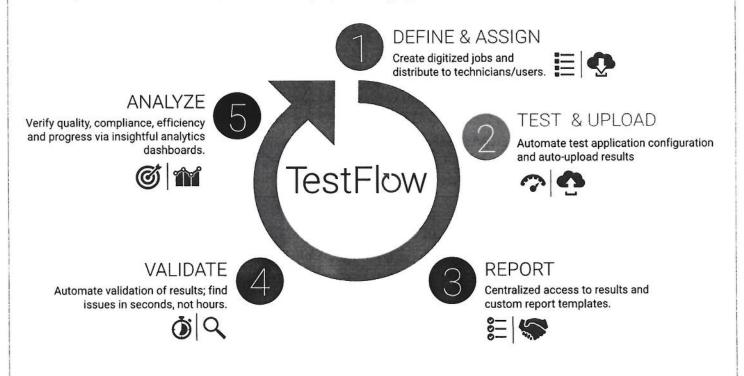
#### **GET MORE FROM FastReporter WITH TestFlow**

**TestFlow** 

CLOUD-BASED FIELD TEST MANAGEMENT

### THE TestFlow PROCESS

Whether you are a field technician, a site lead or a project manager, you can benefit from TestFlow.



Ensure 100% compliance

Right the first time

Automate reporting and batch auditing Faster invoicing and deployments

Informed business decisions

Get your free trial today or for more info: www.EXF0.com/TestFlow





#### TROUBLESHOOTING HIGH-SPEED MULTIMODE NETWORKS WITH ENCIRCLED FLUX





EF launch fiber (SPSB-EF-C30)

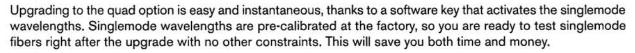
Whether for expanding enterprise-class businesses or large-volume data centers, new high-speed data networks built with multimode fibers are running under tighter tolerances than ever before. In the event of failure, intelligent and accurate test tools are needed to quickly find and fix the fault.

Multimode fibers are the trickiest links to test, because the test results are highly dependent on each device's output conditions. Troubleshooting with a unit other than the construction unit may mislead the technician or result in the inability to find the fault, creating longer network downtimes.

For multimode fibers, EXFO recommends using an external launch mode conditioner that is Encircled Flux (EF)-compliant. The EF standard (as recommended in TIA-568 via TIA-526-14-B and IEC 61280-4-1 Ed. 2.0) is a way of controlling the source launch conditions so that tier-2 troubleshooting can be performed with maximum accuracy and consistency.

#### QUAD OPTION FOR MULTIMODE UNITS

The multimode units offer maximum flexibility by featuring a unique quad-ready ability.





#### OPTICAL PLUG-AND-PLAY OPTIONS

The MaxTester features plug-and-play optical options that can be purchased whenever you need them: at the time of your order or later on. In either case, installation is a snap, and can be performed by the user without the need for any software update.

#### **Optical Power Meter**

A high-level power meter (GeX) that can measure up to 27 dBm, the highest in the industry. This is essential for hybrid fiber-coaxial (HFC) networks or high-power signals. If used with an auto-lambda/auto-switching compatible light source, the power meter automatically synchronizes on the same wavelength, thus avoiding any risk of mismatched measurement.

- > Extensive range of connectors
- > Auto-lambda and auto-switching
- Offers measurement storage and reporting
- > Seven standard calibrated wavelengths

#### Visual Fault Locator (VFL)

The plug-and-play VFL easily identifies breaks, bends, faulty connectors and splices, in addition to other causes of signal loss. This basic, yet essential troubleshooting tool should be part of every field technician's toolbox. The VFL visually locates and detects faults over distances of up to 5 km by creating a bright-red glow at the exact location of the fault on singlemode or multimode fibers (available with the Optical Power Meter only).





# FIBER CONNECTOR INSPECTION AND CERTIFICATION—THE ESSENTIAL FIRST STEP BEFORE ANY OTDR TESTING





Taking the time to properly inspect a fiber-optic connector using an EXFO fiber inspection probe can prevent a host of issues from arising further down the line, thus saving you time, money and trouble. Moreover, using a fully automated solution with autofocus capabilities will turn this critical inspection phase into a fast and hassle-free one-step process.

# DID YOU KNOW THAT THE CONNECTOR OF YOUR OTDR/iOLM IS ALSO CRITICAL?

The presence of a dirty connector at an OTDR port or launch cable can negatively impact your test results, and even cause permanent damage during mating. Therefore, it is critical to regularly inspect these connectors to ensure that they are free of any contamination. Making inspection the first step of your OTDR best practices will maximize the performances of your OTDR and your efficiency.

# FIVE MODELS TO FIT YOUR BUDGET

FEATURES	USB WIRED			WIRELESS	
	Basic FIP-410B	Semi-Automated FIP-420B	Fully Automated FIP-430B	Semi-Automated FIP-425B	Fully Automated FIP-435B
Three magnification levels	√	✓	✓	√	✓
Image capture	√	1	1	<b>V</b>	✓
Five-megapixel CMOS capturing device	√	√	√	√	√
Automatic fiber image-centering function	X	<b>1</b>	1	✓	✓
Automatic focus adjustment	х	х	✓	х	√
Onboard pass/fail analysis	X	✓	<b>√</b>	<b>√</b>	✓
Pass/fail LED indicator	X	✓	✓	✓	√
WiFi connectivity	X	X	X	<b>√</b>	1

For additional information, please refer to the FIP-400B USB or FIP-400B wireless specification sheets.

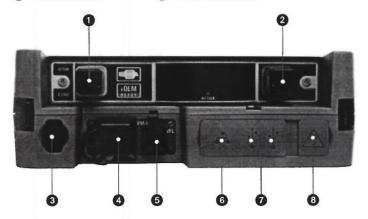
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SOFTWARE UTILITIES		
Software update	Ensure that your MaxTester is up-to-date with the latest software.	
VNC configuration	The Virtual Network Computing utility allows technicians to easily remote control the unit via a computer or laptop	
Microsoft Internet Explorer	Access the Web directly from your device interface.	
Data mover	Transfer all your daily test results quickly and easily.	
Centralized documentation	Instant access to user guides and other relevant documents.	
Wallpapers	Enhance your work environment with colorful and scenic backgrounds.	
PDF Reader	View your reports in PDF format.	
Bluetooth file sharing	Share files between your MaxTester and any Bluetooth-enabled Windows computer.	
WiFi connection	WiFi FIP inspection probe interface. Upload test results and browse the Internet.	
Inspection probe	USB or WiFi probe to inspect and analyze connectors.	
FTP server	Exchange files over wifi to an FTP application on a smartphone for easier file sharing from the field	

# PACKAGED FOR EFFICIENCY

- Singlemode OTDR port
- 2 Multimode OTDR port or Live Singlemode OTDR port
- Stylus
- Power meter
- Visual fault locator
- 6 10/100 Mbit/s Ethernet port
- 7 Two USB 2.0 ports
- AC adapter
- Home/switch application and screen capture (hold)
- Power on/off/stand by
- Battery LED status
- Built-in WiFi/Bluetooth
- (B) Stand support









Space (

# SPECIFICATIONS a

TECHNICAL SPECIFICATIONS		
Display	7-in (178-mm) outdoor-enhanced touchscreen, 800 x 480 TFT	
Interfaces	Two USB 2.0 ports RJ45 LAN 10/100 Mbit/s	
Storage	2 GB internal memory (20 000 OTDR traces, typical)	
Batteries	Rechargeable lithium-polymer battery 12 hours of operation as per Telcordia (Bellcore) TR-NWT-001138	
Power supply	Power supply AC/DC adapter, input 100-240 VAC, 50-60 Hz	
Wavelength (nm) b	850 ± 20/1300 ± 20/1310 ± 20/1550 ± 20/1625 ± 10 ± 1490	
SM live port built-in filter	1625 nm: highpass >1595 nm isolation >50 dB from 1270 nm to 1585 nm	
Dynamic range (dB) °	27/29/36/35/35	
Event dead zone (m) d	Singlemode: 0.7 Multimode: 0.5	
Attenuation dead zone (m)	Singlemode: 3° Multimode: 2,5 <sup>1</sup>	
PON dead zone (m) a	35	
Distance range (km)	Multimode: 0.1 to 40 Singlemode: 0.1 to 260	
Pulse width (ns)	Multimode: 3 to 1000 Singlemode: 3 to 20 000	
Launch conditions <sup>h</sup>	EF-compliant	
Linearity (dB/dB)	±0.03	
Loss threshold (dB)	0.01	
Loss resolution (dB)	0,001	
Sampling resolution (m)	Multimode: 0.04 to 5 Singlemode: 0.04 to 10	
Sampling points	Up to 256 000	
Distance uncertainty (m)	±(0.75 + 0.0025 % x distance + sampling resolution)	
Measurement time	User-defined	
Reflectance accuracy (dB) b	±2	
Typical real-time refresh (Hz)	4	

#### Notes

- a. All specifications valid at 23 °C  $\pm$  2 °C with an FC/APC connector, unless otherwise specified.
- b. Typical.
- c. Typical dynamic range with longest pulse and three-minute averaging at SNR = 1.
- d. Typical, for reflectance from -35 dB to -55 dB in singlemode and -45 dB to -30 dB in multimode, using a 3-ns pulse.
- e. Typical at 1310 nm, for reflectance at -55 dB, using a 3-ns pulse. Attenuation dead zone is 4 m typical with reflectance below -45 dB.
- f. Typical, for reflectance at -35 dB, using a 3-ns pulse.
- g. Non-reflective FUT, non-reflective splitter, 13-dB loss, 50-ns pulse, typical value.
- h. Compliant with Encircled Flux TIA-526-14-B and IEC 61280-4-1 Ed. 2.0 using an external EF conditioner (SPSB-EF-C-30).
- i. Does not include uncertainty due to fiber index.





### **GENERAL SPECIFICATIONS**

Size (H x W x D)

166 mm x 200 mm x 68 mm (6 % in x 7 % in x 2 % in)

Weight (with battery)

1.5 kg (3.3 lb)

Temperature

Operating Storage

-10 °C to 50 °C (14 °F to 122 °F) -40 °C to 70 °C (-40 °F to 158 °F) a

Relative humidity

0 % to 95 % noncondensing

#### SOURCE

Output power (dBm) b

Multimode: -3 Singlemode: -6

Modulation

CW, 330 Hz, 1 kHz, 2 kHz, 1 kHz + blink, 2 kHz + blink

# BUILT-IN POWER METER SPECIFICATIONS (GeX) (optional)

Calibrated wavelengths (nm)

850, 1300, 1310, 1490, 1550, 1625, 1650

Power range (dBm) d

27 to -50

Uncertainty (%) °

±5 % ± 10 nW

Display resolution (dB)

0.01 = max to -40 dBm0.1 = -40 dBm to -50 dBm

Automatic offset nulling range d,1

0.1 = -40 dBm to -50 dBr

Tone detection (Hz)

Max power to -30 dBm 270/330/1000/2000

### VISUAL FAULT LOCATOR (VFL) (optional)

Laser, 650 nm ± 10 nm

CW/Modulate 1 Hz

Typical  $P_{out}$  in 62.5/125  $\mu m$ : > -1.5 dBm (0.7 mW)

Laser safety: Class 2

#### LASER SAFETY





ACCESSORIE	ES (optional)		
GP-10-061	Soft carrying case	GP-2209	Spare Battery
GP-10-072	Semi-rigid carrying case	GP-2240	Utility glove
GP-10-100	Rigid carrying case	GP-2242	Replacement Hand strap
GP-1008	VFL adapter (2.50 mm to 1.25 mm)	GP-2243	Spare AC/DC adapter (Specify country power cord)
GP-2155	Carry-on size backpack	GP-3115	Kickstand
GP-2205	DC vehicle battery-charging adaptor (12 V)	SPSB-EF-C30	Encircled Flux launch cables (specify connectors)
GP-2208	Spare Stylus		

#### Notes

- a. -20 °C to 60 °C (-4 °F to 140 °F) with the battery pack.
- b. Typical output power is given at 1300 nm for multimode output and 1550 nm for singlemode output.
- c. At 23 °C ± 1 °C, 1550 nm and FC connector. With modules in idle mode. Battery operated after 20-minute warm-up.
- d Typical
- e. At calibration conditions.
- f. For ±0.05 dB, from 10 °C to 30 °C.





#### **ORDERING INFORMATION** MAX-720C-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX Model # = FastReporter software MAX-720C = OTDR 00 = Without software option FR2 = FastReporter 2 software Optical configuration SM1 = SM OTDR, 1310/1550 nm WiFi and Bluetooth SM2 = SM OTDR, 1310/1550 nm and 1625 nm live\* 00 = Without RF components Q1 = MM OTDR, 850/1300 nm, QUAD-ready \* RF = With RF capability (WiFi and Bluetooth) .1 Q1-QUAD = QUAD OTDR, 850/1300 nm and Extra FIP-400B tips 1 1310/1550 nm % b **Bulkhead tips** Base software FIPT-400-LC = LC tip for bulkhead adapters FIPT-400-LC-APC = LC/APC tip for bulkhead adapter FIPT-400-SC-APC = SC APC tip for bulkhead adapter OTDR = Enables OTDR application only OLM = Enables iOLM application only FIPT-400-SC-UPC = SC UPC tip for bulkhead adapter Oi = Enables OTDR and iOLM applications Singlemode and multimode connector man-EA-EUI-28 = APC/DIN 47256 FIPT-400-U12M = Universal patchcord tip for 1.25 mm ferrules EA-EUI-89 = APC/FC narrow key FIPT-400-U12MA = Universal patchcord tip for 1.25 mm ferrules APC FIPT-400-U25M = Universal patchcord tip for 2.5 mm ferrules a EA-EUI-91 = APC/SC EA-EUI-95 = APC/E-2000 FIPT-400-U25MA = Universal patchcord tip for 2.5 mm ferrules APCh EA-EUI-98 = APC/LC EI-EUI-28 = UPC/DIN 47256 APC = Includes FIPT-400-U25MA and FIPT-400-SC-APC EI-EUI-89 = UPC/FC narrow key UPC = Includes FIPT-400-U25M and FIPT-400-FC-SC EI-EUI-90 = UPC/ST EI-EUI-91 = UPC/SC Inspection probe model\* EI-EUI-95 = UPC/E-2000 00 = Without inspection probe FP410B = Digital video inspection probe EI-EUI-98 = UPC/LC El connectors = See section on next page Triple magnification FP420B = Analysis digital video inspection probe iOLM software option c Automated pass/fail analysis 00 = iOLM Standard Triple magnification ADV = iOLM Advanced LOOP = iOLM loopback mode Autocentering FP425B = Wireless digital video inspection probe CERT = iOLM tier-2 certification Automated pass/fail analysis Power meter III Triple magnification 00 = Without power meter Autocentering VFL = Visual fault locator (650 nm) FP430B = Automated analysis digital video inspection probe Automated focus PM2X = Power meter; GeX detector Automated pass/fail analysis VPM2X = VFL and power meter; GeX detector Triple magnification Power meter connector adapter 4 at Autocentering FOA-22 = FC/PC, FC/SPC, FC/UPC, FC/APC FP435B = Wireless analysis digital video inspection probe! FOA-32 = ST: ST/PC, ST/SPC, ST/UPC Automated focus FOA-54B = SC: SC/PC, SC/SPC, SC/UPC, SC/APC Automated pass/fail analysis FOA-96B = E-2000/APC Triple magnification FOA-98 = LC Autocentering FOA-99 = MU Example: MAX-720C-Q1-QUAD-Oi-EA-EUI-98-iCERT-VPM2X-FOA-98-FP430B-UPC-FR2

- a. The two ports are configured with the same adapter type.
- b. Multimode connector port will be supplied in UPC.
- c. Please refer to the intelligent iOLM specification sheet for the complete and most recent description of these value packs.
- d. Only available if power meter option is selected. Additional connector adapters available, contact EXFO.
- e. Not available in China.
- f. This list represents a selection of fiber inspection tips that covers the most common connectors and applications but does not reflect all the tips available. EXFO offers a wide range of inspection tips, bulkhead adaptors and kits to cover many more connector types and different applications. Please contact your local EXFO sales representative or visit www.EXFO.com/FIPtips for more information.
- g. Included when UPC base tips are selected.
- h. Included when APC base tips are selected.
- i. Includes a bulkhead adapter for patch cord inspection.
- Available if inspection probe is selected,
- k. Includes ConnectorMax2 software.
- RF option is mandatory and automatically included if FP425B or FP435B fiber inspection probe model is selected.
- m. Multimode connectors available in El (UPC) only.





#### **EI CONNECTORS**



To maximize the performance of your OTDR, EXFO recommends using APC connectors on singlemode port. These connectors generate lower reflectance, which is a critical parameter that affects performance, particularly in dead zones. APC connectors provide better performance than UPC connectors, thereby improving testing efficiency.

For best results, APC connectors are mandatory with the iOLM application.

Note: UPC connectors are also available. Simply replace EA-XX by EI-XX in the ordering part number. Additional connector available: EI-EUI-90 (UPC/ST).

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