FiBLU

Mobile App-Enabled Fibre Certification Tester



FiBLU takes fibre testing into the future with app-native intelligence, lower TCO, protection for your investments and enhanced collaboration.

As networks become more software-defined and operations more distributed, testing must evolve to support faster deployment, real-time visibility and seamless collaboration across teams.

App-driven platforms enable continuous improvement, remote collaboration and integration with project and asset systems, helping organisations streamline workflows and improve operational efficiency.

FiBLU represents this shift—moving fibre certification from static, hardware-bound testers to a connected, upgradable and data-driven testing model aligned with modern network environments.

- App-Native Architecture
- Fibre Certification (Tier 1)
- Dual Wavelength Testing
- Bi-Directional Testing
- Real-Time Cloud Workflow
- Instant Reporting
- Remote Collaboration
- Field Ready (18+ Hour Battery)

It shifts intelligence from fixed hardware to a smartphone platform, enabling faster testing, real-time reporting and closer coordination between field teams and central operations.

The result is a more agile, scalable and cost-efficient approach to fibre testing—reducing rework, accelerating handovers and eliminating repeated investment in new test equipment.

KEY CAPABILITIES AND TECHNICAL FEATURES

App-Native Architecture
FiBLU is built around a smartphone-based interface, enabling faster processing, continuous software upgrades and a more intuitive user experience without hardware dependency.

Real-Time Cloud Workflow
Automatically synchronises test results via cloud platforms, providing instant visibility across teams without manual uploads or data transfer delays.

Fibre Certification (Tier 1)
Standards-compliant certification supports ISO, IEC and TIA requirements, ensuring fibre links meet performance specifications before network commissioning and handover.

Instant Reporting
Generates and shares test reports immediately after testing, eliminating backlog and improving project timelines, documentation accuracy and billing readiness.

KEY CAPABILITIES AND TECHNICAL FEATURES (continued)

Dual Wavelength Testing
Tests fibre links across required wavelengths for singlemode and multimode networks, ensuring compatibility with real-world applications and detecting wavelength-dependent issues.

Bi-Directional Testing
Measures fibre links from both ends and averages results to eliminate directional loss errors, ensuring accurate, standards-compliant certification.

Remote Collaboration
Enables remote access to test data, allowing experts to support field technicians in real time, reducing rework and accelerating issue resolution.

Field Ready (18+ Hour Battery)
Designed for uninterrupted field use with extended battery life and USB-C charging, ensuring continuous operation across long deployment cycles.



App First by Design / Enhanced Usability

- Upgradable & app-native by design – built around the smartphone, not adapted later
- One-hand operation in real environments
- Live results on-site – no back-and-forth between tester and laptop/reporting tools
- Plug-and-play workflow – connect, launch app, start testing

UNIBLU MOBILE APP

UniBLU is the professional mobile application that controls and manages FiBLU. Available on iOS and Android, it gives field technicians and network engineers an intuitive interface to perform fibre certification tests, configure test standards, manage project data, and sync results to the cloud or to TestDataPro PC software. FiBLU communicates with UniBLU wirelessly via Bluetooth.

Test functions: Autotest (Loopback, Dual-Ended Unidirectional, Dual-Ended Bidirectional), Simplex Test, Set Reference (1/2/3-jumper), TRC verification, Light Source / Power Meter, Visual Fault Locator.

Cloud testing: Google Drive or Microsoft OneDrive with Owner, Manager, Operator and Viewer roles. Reports export as PDF or CSV; projects export as .ubu files for TestDataPro.

System Requirements	
iOS version	iOS 15.5 or later
Android version	Android 11 or later
Connectivity	Bluetooth (WPAN 2.4 GHz, v4.2 or higher)
Storage	Required for cloud sync and firmware updates
Internet access	Required for cloud sync and firmware updates

FiBLU standard kit contents

- SM/MM FiBLU tester
- Fibre reference cord SM/MM simplex FC-LC
- Fibre reference cord SM/MM simplex LC-LC
- Fibre cleaner SC
- Fibre cleaner LC & carry case

FIBLU DEVICE SPECIFICATIONS

Loss / Length Specifications

Parameter	Multimode (MM)	Singlemode (SM)
Source type	LED	Laser
Wavelengths (nm)	850 ± 20, 1300 ± 20	1310 ± 20, 1550 ± 20
RMS spectral width (nm)	35	5
Output power	850 nm: 10–20 µW | 1300 nm: 10–20 µW	1310 nm: 1–2 mW | 1550 nm: 1–2 mW
Max length measurement	2 km	20 km
Dual ended loss	0 dB to −10 dB	0 dB to −12 dB

General Specifications

Parameter	Specification
Transmit interface	Interchangeable SC adapter
Receiver interface	Interchangeable FC, SC, ST, LC adapters
Autotest speed	Loopback: about 1 s Dual ended: < 2 s
Insertion loss accuracy	≤ 0.2 dB
Measurement repeatability	≤ 0.05 dB
Length measurement accuracy	± (1 m + 1% of length)
Source wavelengths	MM: 850 nm and 1300 nm SM: 1310 nm and 1550 nm
Power measurement range	850 nm: 0 to −10 dBm 1300/1310/1550 nm: 0 to −30 dBm
Calibration interval	1 year

Parameter	Specification
Dimensions	177 mm × 92 mm × 42 mm
Weight	350 g
Battery	Li-Ion 3.7 V / 2600 mAh — 40 hours typical
Charging time	3.5 hours (USB-C)
Connectivity	WPAN 2.4 GHz Bluetooth v4.2 or higher
Android app requirement	Android 11 or higher
iOS app requirement	iOS 15.5 or higher
Laser safety class	Class 1M

VFL Specifications

Parameter	Specification
VFL light source	650 nm laser
Power output	1 mW
Output modes	1.5 Hz pulsed mode
Connector adapter	2.5 mm universal
Laser safety class	Class II

Environmental Specifications

Parameter	Specification
Operating temperature	0 °C to 45 °C (32 °F to 113 °F)
Storage temperature	−30 °C to +60 °C (−22 °F to +140 °F)
Operating humidity	0–90% RH (0 °C–35 °C) | 0–70% RH (35 °C–45 °C)
Vibration	Random, 2 g, 5 Hz–500 Hz
Shock	2 m drop test
Operating altitude	Up to 4,000 m (13,123 ft)
EMC	EN 61326-1

STANDARDS & COMPLIANCE

Item	Specification
Certification	TIA-568, ISO/IEC 14763-3 (Tier 1)
Safety	IEC 61010-1 (3rd Edition)
EMC	EN 61326-1
Laser safety	Test ports Class 1M; VFL Class II

Safety precautions. Avoid direct eye exposure to laser light; never look into the VFL port while active and replace its protective cap when not in use. Do not operate in explosive or flammable atmospheres; keep away from liquids. For full regulatory documentation, contact AEM Networks.

ORDERING INFORMATION

Kits and handsets

Part number	Description
FIBLU-MM-K01	**Multimode Fibre Certifier Pair.** Two MM handsets, USB-C cables, SC Tx and SC/LC Rx adapters installed, OM4 test reference cords (2× SC-LC, 2× LC-LC, 4× SC-SC), duplex SC and LC couplers, soft carry case.
FIBLU-SM-K01	**Singlemode Fibre Certifier Pair.** Two SM handsets, USB-C cables, SC Tx and SC/LC Rx adapters installed, singlemode test reference cords (2× SC-LC, 2× LC-LC, 4× SC-SC), duplex SC and LC couplers, soft carry case.
FIBLU-QD-K01	**Multimode/Singlemode Fibre Certifier Kit.** 2 MM and 2 SM handsets, USB-C cables, adapters installed, MM and SM test reference cords (2× SC-LC, 2× LC-LC, 4× SC-SC each), 2 duplex SC and 2 duplex LC couplers, soft carry case.
FiBLU-MM	**Multimode single handset** with USB-C cable and SC Tx / SC, LC Rx adapters. Two required for dual-ended certification.
FiBLU-SM	**Singlemode single handset** with USB-C cable and SC Tx / SC, LC Rx adapters. Two required for dual-ended certification.

Use of the UniBLU app and a Bluetooth connection to a mobile device is required for operation. AC-to-DC charging adapters are not included.

Accessories

Part number	Description
OM4-SC-SC 2M	OM4 multimode SC-SC TRC
OM4-SC-LC 2M	OM4 multimode SC-LC TRC
OM4-SC-ST 2M	OM4 multimode SC-ST TRC
OM4 LC-LC 2M	OM4 multimode LC-LC TRC
OM4 ST-ST 2M	OM4 multimode ST-ST TRC
OM1-SC-SC 2M	OM1 multimode SC-SC TRC
OM1-SC-LC 2M	OM1 multimode SC-LC TRC
OM1-SC-ST 2M	OM1 multimode SC-ST TRC
OM1 LC-LC 2M	OM1 multimode LC-LC TRC
OM1 ST-ST 2M	OM1 multimode ST-ST TRC

Part number	Description
SM-SC-SC 2M	Singlemode SC-SC TRC
SM-SC-LC 2M	Singlemode SC-LC TRC
SM-SC-ST 2M	Singlemode SC-ST TRC
SM LC-LC 2M	Singlemode LC-LC TRC
SM ST-ST 2M	Singlemode ST-ST TRC
SM-LOOPBACK-LC / -SC	SM loopback adapter, LC or SC
MM-LOOPBACK-LC / -SC	MM loopback adapter, LC or SC
FI-ST-RX	ST interface for FiBLU Rx port
FI-ST-TX	ST interface for FiBLU Tx port
ACC-SOFT-CASE-FI	Soft case for 4 handsets + accessories

TRC = Test Reference Cord, supplied as single 2 m cords.