

# GPON TESTER+

## GPON Handheld Tester

### DESCRIPTION

GPON Tester+ is an integral solution for PON certification. It allows the validation and certification of a GPON network in deployment or already installed by in field technicians and installers.

### NEW Feature!

GPON Tester + has the capacity to reshape 1490 and 1310nm GPON optical signals so that its presence in the PON do not introduce any additional attenuation and the OLT and ONU could communicate as if the Tester is not present.

### ON installation Test

GPON Tester+ allows the realization of advanced measures, such as 1550nm and 1490nm downstream power meter, reflection power in 1310nm up-link, distance to first reflection, distance to the OLT.

GPON Tester+ can emulate the ONT of the client, in order to synchronize with a real OLT and verify the correct subscriber's service provisioning.

GPON Tester+ has the ability to act as a reach extender (ITU-T G.984.6) for a customer ONT. Customer ONT can be plugged to the PON during GPONTester+ measurements.

GPON Tester+ is able to extract both upstream and downstream PLOAM messages from the PON. This allows GPON-Tester+ to detect PON information such as contained on PON-ID PLOAM messages and customer ONT serial number, password and assigned ONU-ID on the PON.

### GPON NETWORK CERTIFICATION

GPON Tester+ has the capacity to generate digitally signed reports with the information generated by the analysis tests, which is used to certify unmistakably the state and the proper installation of the connection by the intifield technician, and allows tracing back later the parameters of the connection the moment of the installation.

Real-time information of optical power metering is displayed on integrated 2.4" LCD screen. GPON Tester+ Windows Application allows for graphically real-time display of the received power and monitor its value over time (all the information is exportable in a CSV file).

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FTTH analysis & monitoring tools



### FEATURES

#### Certification

Certification of CTO or Optical socket points

Continuous test mode: Continually will run tests on: 1490nm downstream power, 1550nm downstream power, 1310nm reflected signal, sync with OLT and auth with OLT

Continuous PON traffic extraction: Continually extracts downstream PON-ID PLOAM Frames and upstream ONU-ID on ONT extension port

Pass/Fail thresholds are stored on GPON Tester+

Pass/Fail thresholds for each power meter are configurable

Report generation

"Crypto-signed" reports: manipulation can be easily detected

Measure and report generation in one step

Report includes all relevant information: Test results, values measured, Serial Number used, password used, state of ONT...

#### Measurement

1490nm optical signal power measurement.

1550nm optical signal power measurement.

1310nm reflected burst mode power measurement.

1310nm reflected signal: Measurement distance to first reflection.

1310nm reach extension port power level guide. Visual information for correct attenuation on extension reach port.

Measurement of distance to OLT . Based on GPON protocol parameters.

Long running downstream optical signal power sampling: Exportable to CSV file.

ONT Sync Detector: Detects resync of any ONT syncing to the network from any point of the PON . Detected ONTs reported to CSV file.

Downstream BER calculation on activated FEC.

TCONT configuration detection: Service configuration check for given user.

GEM port configuration detection for given user (If provisioning concludes).

## TECHNICAL SPECIFICATIONS

### Technical features

Portable, rugged, small form factor, 900gr.

Battery powered.

AC powered.

USB, AC rechargeable.

2.4" LED screen.

In device complete visual verification: Power Meter results, reflection tests, battery status, operation status, PON information.

SC/APC PON Test port.

SC/APC PON Reach extension port. GPON Tester+ reach extension port (ITU-T G.984.6) for an ONT.

FEC compatible: Both upstream and downstream.

Capable to sync with OLT. Detection of Sync Status with OLT . Detection of configuration Status with OLT.

Detection of downstream PON-ID PLOAM frames defined on ITU-T G.984.3.

Reach extension port : Detection of ONU-ID on upstream PLOAM frames defined on ITU-T G.984.3.

Reach extension port: Detection of ONU serial number on upstream PLOAM frames defined on ITU-T G.984.3.

Reach extension port: Detection of ONU password on upstream PLOAM frames defined on ITU-T G.984.3.

Reach extension port : Capable to extract any other upstream or downstream PLOAM or OMCI messages on PON if required.

Windows XP/Vista/7/8 compatible.

Windows Based: .NET Low CPU/memory requirements.

Firmware and software fully upgradable.

Serial Number configurable . GPON Password configurable.

#### Phone reporting:

Online measure and certification with remote checking on the phone.

Measure done and transmitted over the phone (voice) with a 8 characters validation code. Data integrity can be checked with given application in real time with no Internet connection.

#### Web Service:

"Crypto-signed" reports can be send automatically to a web service through any internet connection with user/password authentication. Data integrity can be checked by web service in real time.



## GPONDOCTOR

### OLT-e

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#### CONTACT INFORMATION

##### GPONDoctor Scoop

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