

T-BERD/MTS-2000/-4000V2

Latest Version

Version ID : 234241

Release date : October 19, 2023

Application	Version	Date
Microscope	V23.62	2023/10/19
Instrument Setup	V23.62	2023/10/19
Fiber Optics	V23.62	2023/10/19
Boot	10.84.0	2023/08/11
Linux Kernel	25.6.2	2023/09/22
File System	23.4.4	2023/10/19

OTDR

New Features / Improvements

- T-BERD/MTS-2000 only: Removal of SuperExpert license, the features are now available by default in ExpertOTDR set-up menu
- Main enhancements:
 - FTTH-SLM: 1/64 splitter topology measurement
 - OTDR grouped-events
- Main bug fixes:
 - FTTH-SLM: Multiple fiber ends icons at 1310/1550nm
 - o Events displayed after a manual "Fiber End" event addition in SmartLink view
 - Wrong Section loss displayed in PDF and json files
 - Cursor position or presence in PDF
- Translation updates and overlap corrections (German)

FiberComplete PRO - FiberComplete

New Features / Improvements

• Simplified set up & New options:

-> Caution: all existing Config. Files may need to be redone.

-> Caution: both units will need to have this SW version. Mixing previous SW versions with this one will cause communication errors.

- New: Direct short cuts in Process view for: "Launch cable, Receive cable, Location A, Location B": a long touch gesture on the purple screen zone allows to open the dedicated dialog box, without the need to go in the set up menu,
- New: Set up wording & sections changed: "Test Cables", "laser" selection different between IL/ORL & OTDR,
- New OTDR acquisition option: "Manual" with "Pulse" & "Acquisition time" set up,
- New: .sor files saving option in Report set up (file content: "one & all traces"),

VIAVI

- \circ $\;$ Simplified: Expert set up menu adjusted upon FCOMP set up:
 - If OTDR acq. Is auto or manual -> "Expert OTDR" app set up available is: Display/Advanced. By default: Connector test = no ; include link start connector= yes, include link end connector = yes,
 - If OTDR acq. Is Expert OTDR-> "Expert OTDR" app set available is : Acquisition/ Alarms/Display/Advanced.
- Rationalization & better user guidance:
 - New: time synchronization between local & Remote @Start,
 - New: Referencing/ Factory Ref: automatic exit of the referencing menu after "factory ref" icon pressed,
 - New: icon continuity now displayed during the referencing process/ removed from Process, IL/ORL bidir & Smartlink views,
 - New: @Start, an alert message is displayed if no referencing has previously been recorded,
 - Specific Test sequences no longer available: ORL standalone, OTDR Unidir only
 - Remote unit: Smartlink view no longer displayed, results files no longer saved
 - Revised: Autoset (Fields list in the user manual),
 - Revised & renamed: 5 Default config files for demonstration: IL ORL; IL ORL Fault Finder; IL ORL UnidirOTDR; IL ORL TrueBIDIR; TrueBIDIR. (previous default config files will no longer be available),
 - Revised: all non-relevant soft keys are inactivated during the referencing process.
- FCOMP. Pdf Report:
 - Wording updated,
 - o IL/ORL & Length results with mode: CW or OTDR mentioned,
 - Translation updates: German.
- Main bug fixes:
 - o TrueBIDIR analysis,
 - o References with Loopback method: ORL display & specific test sequences,
 - Referencing process stability, 0 ORL recording
 - Synchronization between units (with & without switch),
 - Fast report with .msor & .sor,
 - Automatic detection of remote & local SW version & HW incompatibilities: pop up messages, adjusted set up,
 - Loopback OTDR Acq.: transmission of FCOMP set up in Expert, corrections in .pdf report, SmartAcq. Disabled.

Cable-SLM / MultiFiber MPO12 Switch

- Cable-SLM + FiberComplete PRO:
 - Project report FCOMP: both devices, alarms, results table with total tested/passed/failed; label ID, Link Loss AB & Link Loss BA with mode : CW or OTDR mentioned, # of events,

VIAVI

- Continuity icon now displayed in Cable view,
- Cable-SLM :
 - Project creation simplified (less fields, label list @ no by default)
 - Load config files after project creation no longer possible
 - During a test sequence, in cable view: "Close project" soft key inactivated, other fiber selection not possible anymore
 - Results view: color coding simplified, check mark removed on project without labels.
- MultiFiber MPO12 switch:
 - Switch serial # displayed in the .pdf report
 - No longer available: "full switch sequence" without an opened project (with Cable-SLM SW option installed)

OSA/OCC

Problems Correction

- OSA Error in calculating cursor position
- OSA text setup "Detect.: Permanent" partly overrides "Splitter" on display
- OCC-4055 and OCC-4056: Incorrect auto threshold calculation

Inspection

New Features/ Improvements

• Translation Updates (French)



Previous Versions History

Version ID : 233110

Release date : July 21, 2023

Application	Version	Date
Microscope	V23.40	7/21/23
Instrument Setup	V23.40	7/21/23
Fiber Optics	V23.40	7/21/23
Boot	10.81.4	3/31/2023
Linux Kernel	25.2.2	3/3/2023
File System	23.1.23	7/31/2023

OTDR

<u>New Features / Improvements</u>

- Receive Cable position bug fix
- Translation updates and corrections (German & Czech)
- Miscellaneous bug fixes

FiberComplete PRO

New Features / Improvements

- Link Description set-up menu now consistent between FCOMP and OTDR functions
- FCOMP Remote unit information now included into all reports
- Miscellaneous bug fixes

Test Process Automation (TPA) / Job Manager

New Features / Improvements

- Added broader character support for TPA fields
- FCOMP-PRO/Bi-dir OTDR Job Manager test sequence bug fix
- Miscellaneous bug fixes





Release date : June 5, 2023

Application	Version	Date
Boot	10.81.4	2023/03/31
Linux Kernel	25.2.2	2022/03/03
File System	23.34	2023/06/06
Instrument Setup	23.34	2023/06/05
Microscope	23.34	2023/06/05
Fiber Optics	23.34	2023/06/05

OTDR

Problems Correction

- ExpertOTDR: minor modifications of the setup menus
- Miscellaneous bug fixes and translation corrections

FiberComplete PRO / Multi-Fiber Switch

Problem Corrections and Improvements

- Individual report (.txt + .pdf) : remote unit serial number and calibration date now displayed
- Miscellaneous bug fixes and translation corrections

OSA/OCC

Problems Correction and Improvements

• Modification of the nanoOSA message when another FO application is selected/running

Test Process Automation (TPA) / Job Manager

New Features/ Improvements

- Aligned Metadata sent to StrataSync across instruments
- Miscellaneous bug fixes

Inspection

New Features/ Improvements

- Delete tip settings via the Setup menu
- Delete analysis profiles via the Setup menu
- Delete report logos via the Setup menu
- Miscellaneous bug fixes



Release date : April 7, 2023

Application	Version	Date
Boot	10.81.4	2023/03/31
Linux Kernel	25.2.2	2022/03/03
File System	23.1.12	2023/04/07
Instrument Setup	23.22	2023/04/07
Microscope	23.22	2023/04/07
Fiber Optics	23.22	2023/04/07

OTDR

Problems Correction

• E41CWDM10U OTDR module no longer crashes with T-BERD/MTS-2000 & 4000v2 Platforms

Improvements

- Combo PM/OTDR Test Results
 - Auto Store disabled. Now possible to add comments, notes or change event type.
 - Power level now included in PDF report

FiberComplete PRO / Multi-Fiber Switch

New Features

- Analysis & alert messages now displayed if units have different FO SW version
- Alert message displayed if the remote unit has a different laser set than the master unit (for ex. 3 lasers selected on master whereas 2 lasers only are available on remote)

Problem Corrections and Improvements

- ".sor" savings set up ("one trace" or "one and all traces")
- Results display: IL/ORL tab (IL/ORL Bidir; length, Mode: CW or OTDR)
- Limitations of options selection (SmartAcq, PON & unbalanced FTTH) when TrueBIDIR is selected
- .pdf report correction
- German translations corrections
- Referencing not possible if on-going testing sequence

With Multi-Fiber Switch Module:



- Automatic switching sequence with Cable-SLM : set up +messages have been updated
- Polarity & continuity: faster measurement process
- Cable-SLM SW is now an option for FiberComplete + Multi-Fiber switch
- Length measurement fix

OSA/OCC

Problems Correction

- OSA A-B cursors info changed to dB instead of dBm
- Software crash when an OCC-4056 module with an SFP transceiver plugged-in is fixed

Test Process Automation (TPA) / Job Manager

New Features/ Improvements

- Added formal support for Android connectivity (smart devices running Android 12 or a newer version recommended)
- Improved support for iOS connectivity with VIAVI Mobile Tech app
- Improved support for Ethernet/Wi-Fi connectivity with VIAVI Mobile Tech app
- Added support for job creation via API
- Added support for job creation via VIAVI Mobile Tech app
- Added support for configuration deployment from StrataSync
- Added support for software option deployment via VIAVI Mobile Tech app
- UX/UI improvements for the instrument-based Job Manager
 - Support for creating jobs locally via templates
 - o Improved integration with fiber tests
- Miscellaneous bug fixes

Inspection

New Features/ Improvements

- Added support for importing test results from a USB-connected FiberChek probe microscope
- Added support for updating the profiles on a FiberChek probe microscope when deployed from StrataSync
- Added an About screen under Setup
- Improved management of tip settings and profiles when deployed from StrataSync
- Improved popup messages when using Job Manager
- Miscellaneous bug fixes



Release date : March 2, 2023

Application	Version	Date
Boot	10.81.3	2023/03/02
Linux Kernel	25.2.2	2022/11/04
File System	23.1.4	2023/03/02
Instrument Setup	23.08	2023/03/02
Microscope	23.08	2023/03/02
Fiber Optics	23.08	2023/03/02

OTDR

Improvements

- Enhancement of grouped events pass/fail analysis
- Possibility to add a customized pulse width in the OTDR setup menu
- Default bend detection change to 0.3dB
- ExpertOTDR: Event notes now available standard (no longer requires Super Expert SW license) for Point-to-Point and PON Network Configs
- "Show cursor" setting is now saved in the config file
- SLM/Table update problem when changing event type manually
- "." Symbol added to German keyboard

LTS (Power Meter/ Source Application)

Improvements

• Problem with directory management is fixed

Cable-SLM

Improvements

- Enhanced management of labels
- Acquisition test sequence performed according to presence of optical switch or not
- New Cable-SLM project creation
- FCOMP-PRO job associated to Cable-SLM now pushes configuration into both FCOMP-PRO and OTDR.

FTTH-SLM

Improvements

- 4100A module: With FTTH-SLM Base License, the selection and analysis of 2 splitters is now available
- Correct splitter measurement with Launch cable directly connected
- Event code on top of existing splitter icon is correct when reloading .csor file

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FiberComplete PRO

New functionalities

• High acquisition time with manual OTDR set up (3min)

Improvements

- Faster switching time for MPO switch
- Switch port selection now possible with Cable-SLM project/ label/ Simplex fiber
- Enhancement of the stop function in FCOMP-PRO while running a test sequence MPO SWITCH MODULE:
 - Set up option "switch sequence" no longer accessible in the HMI when a project has been opened via Cable-SLM (option remains possible in manual switching mode only)
 - Set up option "MPO 20/24 & MPO 24/24" no longer accessible in Cable-SLM project/ label list/ multifiber connectors/fiber count
 - Set up option "Report/ consolidated option" no longer accessible with Cable-SLM project opened

FCOMP-PRO:

- Pdf report now includes OTDR traces after "replay TrueBidir" is performed
- Time-out between products in both extremities is fixed
- 4100A module now compatible with TrueBidir & Loopback SW options
- Simultaneous project creation either on ExpertOTDR or FCOMP-PRO with Job manager

OSA/OCC

Improvements

- Configuration table functionality is now available with WDM expert license new GUI
- In Grid Mode "Manual" the marker can jump to wrong channel if clicking WDM table line is fixed

Job Manager

Improvements

Possibility to handle job template files coming from StrataSync or MTA

TPA

New Functions

Integration of a full StrataSync/Mobile Tech App process with Job Manager

Inspection

New Functions

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- User interface refresh
- Allows probe microscope firmware updates via host instrument
- Now possible to add new inspection tip settings via a USB drive or StrataSync
- Now possible to add new test profiles via StrataSync
- End face image now saved/embedded within the saved JSON results



Release date : July 21, 2022

Application	Version	Date
Boot	10.81.1	2022/07/21
Linux Kernel	25.1.0	2022/05/31
File System	23.0.7	2022/07/22
Instrument Setup	22.52	2022/07/21
Microscope	22.52	2022/07/21
Fiber Optics	22.52	2022/07/21

Mainframe / Base Unit

New functionalities

• Integration of password protection at turn up. Optional license (EPASSWORDPROTECT) Improvements

- Management of exclusivity when 2 OTDR modules housed on the same machine
- P5000i Inspection Probe Asset Management in StrataSync
- Increase number of characters in comment field (up to 99)
- Improvement of boot up process with color transition

Problem corrections

- Special characters ("-" and "_") added on German alphabetic keyboard
- Display error on upgrade screen corrected
- Files with a space in the name can now be uploaded to MTA (iOS only)
- Japanese: Application no longer crashes while saving pdf report

OTDR

New functionalities

• Predefined G654E specifications added to the list of fiber parameters (IOR, backscattered...)

Improvements

- Improved Touchscreen calibration for TRACE TABLE SLM selection
- Events table redesigned for better legibility
- Ability to hide trace in Expert OTDR addition
- New A & B cursor management
- Update launch cable" menu labelling now Test Cable

Problem corrections

- OTDR Assistant (SmartTEST, FTTH-SLM): incorrect field in page "record information"
- No longer cut task naming shorter than 100 characters
- Launch cable management if incorrect length entered
- Problem of event detection after fiber end on short links now fixed



- Labelling of splice detection when manually set to 0.05dB always shows "Auto"
- Mini linear view correction when switching direction with an .msor file
- Correction of SmartLinkMapper refresh in OTDR tab after FiberComplete acquisition
- "Copy file/link to all" doesn't copy job id to the SLM-Enterprise menu
- OTDR Expert Cursors remain hidden even in Analysis when set to "No"
- Trace info correction of linear attenuation between A&B cursors
- Issues with mini linear view when many events detected

FTTH-SLM

Problem corrections

• Correction of incorrect trace recombination in multi-pulse acquisition

FiberComplete PRO

New functionalities

- FiberComplete-PRO MPO reference management
- CABLE-SLM integration and management into FCOMP-PRO

Improvements

- FCOMP-PRO now saves msor file with AB and BA multi-wavelength OTDR traces and distributed events (sor storage to be selected in Expert)
- Enable loss and ORL results display with TrueBIDIR only
- Add loss, ORL and length in summary table when performing TruBIDI only test
- High fiber count cable Workflow with FCOMP-PRO
- Launch cable management in Bi-dir IL/ORL only test configuration
- Do not allow START/Real Time OTDR when FCOMP/FCOMP PRO is active
- CABLE-SLM integration and management into FCOMP-PRO
- OTDR/FCOMP/FCOMP-PRO: Contextual help for ORL & total Loss
- OTDR loopback: change the JSON loopback extension file from ".fcpro.json" to ".bidir.json".
- New FCOMP-PRO connectivity icon.
- Add fiber number in FiberComplete PRO Loopback Summary table.
- Add section/slope selection in the SmartLink view.
- Adapt reference process graphic to MPO connector.

Problem corrections

- FCOMP-PRO: Wrong format type displayed in the file explorer.
- B to A slope values are not stored correct in the TrueBIDIR json files
- Incorrect Cable-SLM target storage folder when set up as "dir/current" different than disk
- In cable view, long labels are truncated- Now possible to scroll left and right



OSA/OCC

Problem corrections

- OCC pdf report now matches results table
- Wait period with nanoOSA (41OSA) now working
- Open OSA trace without autozoom and keep zoom defined at storage
- OCC drift function brought back





Release date : February 17th, 2022

Application	Version	Date
Boot	10.81.0	2022/01/28
Linux Kernel	21.8.2	2021/12/17
File System	21.10.2	2022/02/17
Instrument Setup	22.02	2022/02/17
Microscope	22.02	2022/02/17
Fiber Optics	22.02	2022/02/17

Mainframe / Base Unit

New functionalities

• Management of the new 4100 A-Series OTDR module

Improvements

- Improved and simplified software upgrade messages and softkeys (via Ethernet/WiFi)
- Test set calibration date added to all .pdf reports
- Improved readability in the About page of modules long part number and serial number

Problem corrections

• Merge of multiple .pdf in the File Explorer

Microscope

New functionalities

• Microscope function put in live mode when coming from the job manager

LTS (Light source & power meter)

Problem corrections

• Proper management of the power meter zero offset

OTDR

New functionalities

• Fiber ID added to Fast Report setup menu

Improvements

- Key and menu labels updates:
 - File setup changed into Report
 - File softkey changed into File Explorer
- User interface updates:
 - Zoom buttons position moved to the top right corner of the graph
 - Setup menu: Test Cables section added. It contains Launch, Receive and Loopback cable settings
 - o SmarLink Mapper: ability to select a section/slope
 - SmartLink Mapper: enhancement of the event detail description (splitter description with FTTH-SLM Base license, pass/fail criteria & threshold values)



FTTH-SLM

New functionalities

• Job ID added to .csor PDF report

Improvements

• When Job Manager pushes FTTH config file, it updates the "Config." setup field inside FTTH-SLM

Problem corrections

• When the first event corresponding to the first standard splitter (of an unbalanced splitters network) is detected at position < 0m, the event is not detected/interpreted as splitter but as launch cable.

FiberComplete PRO

New functionalities

- Fiber number increased to 9999
- Cable-SLM management to create project/cable view and simplify the management of high fiber count testing:
 - New button Manage Project and setup popup window: import label list, create simplex or MPO cable structure
 - o Fully automated test sequence for up to 12 fibers (with integrated MPO switch)
 - o Pass/fail status of tested fibers/labels in Cable tab
 - o Creation of a .prj file that contains labels / structure and pass/fail status
 - When a Cable-SLM project closes, a summary .pdf report is generated. It contains the average loss, worst ORL, length and pass/fail status per tested labels/IDs and wavelengths.
 - \circ Switch port used for the current measurement is displayed in the **Process** tab
- Length of the fiber under test, displayed in the **Process** tab on the **synoptic**, does not include the launch and receive cables length

Improvements

- Suppression of launch and receive cable management by event position
- Enhancement of bi-directional OTDR (Loopback mode) slope measurement
- Pass/fail event thresholds made available for the bi-directional OTDR Loopback mode
- Better management of custom jobs coming from StrataSync
- Fault Finder results only visible in the Fault Finder tab
- OTDR Loopback mode allowed when changing setup from IL/ORL and/or TrueBIDIR/BiDir OTDR Problem corrections
- Fault Finder results only visible in the Fault Finder tab
- When using Expert OTDR settings, the file naming of the OTDR results missed the wavelength field (if OneTrace/.sor). To make sure the file name in understandable, underscores are added between the fields.
- Improved length measurement with 4100 MA3-FCOMP



OSA/OCC

Improvements

• Nano OSA: better management of the splitter compensation function



Release date : Dec 01, 2021

Application	version	Date
Boot	10.80	2021/10/08
Linux Kernel	21.8.2	2021/09/27
File System	21.9.11	2021/11/26
Instrument Setup	21.62	2021/11/26
Microscope	21.62	2021/11/26
Fiber Optics	21.62	2021/11/26

Mainframe / Base Unit

New functionalities

• Improvements and corrections of the new user interface

Improvements

- German translation errors
- PDF report now better highlights failed results

Problem corrections

• Home page text overlap in Portuguese language

OTDR

Improvements

- TrueBIDIR function can now be activated on any 4100 series B & C OTDR modules
- Management of different extremities

Problem corrections

• TrueBIDIR now works when directory name contains space

FCOMP-PRO/FiberComplete

Improvements

- TrueBIDIR function now activates on any 4100 series B & C OTDR modules
- Management of different extremities

Problem corrections

• Setup exchange now possible even if talk set or cloud connection enabled between both test sets



Release date : Oct 08, 2021

Application	Version
Boot	10.80
Linux Kernel	21.8.2
File System	21.9.2
Instrument Setup	21.50
Microscope	21.50
Fiber Optics	21.50

Mainframe / Base Unit

New functionalities

- Improvements and corrections of the new user interface
- Addition new license TrueBIDIR: ETRUEBIDIR-FCOMP-PRO

Improvements

- PDF reports always include cursors A&B on graph
- Ability to do a screenshot from the Results page with new UI
- Translation updates (Chinese, German, Hungarian and others) <u>Problem corrections</u>
- T-BERD/MTS4000 random lock up at turn-up (White screen)

Microscope

Improvements

• Test report settings always kept at product turn off

OTDR

New functionalities

- New TRUEBIDIR functionality allowing performing automated bi-directional OTDR measurements with setup and results transfer through the fiber under test
- Add 25GHz channel grid for DWDM OTDR application

Improvements

- Better management of 3-splitter clusters in PON architecture with FTTH-SLM
- Optimized test time vs. pulsewidth in high split ratio (>1x64)

Problem corrections

- The launch cable integrated into the OTDR modules is correctly managed
- Average loss value different between pdf report and SLM Test Process Automation (TPA) New functionalities
- Management of FiberComplete workflow into StataSync, MobileTechApp and Job Manager



- Management of new FCOMP-PRO results and jobs (workflow process availability pending official Stratasync software version 13.0 and MobileTechApp 4.6)
- Send and receive FCOMP-PRO config files to/from Stratasync

Improvements

- Add metadata to Bidir IL/ORL pdf reports for Stratasync
- Inspection scope + OTDR process flow better managed Problem corrections
- Factory sync of purchase order number and date

OSA/OCC

New functionalities

- New OSA module for T-BERD/MTS 2000/4000/5800 and ONA-800 mainframes
- New OSA user interface

FCOMP-PRO/FiberComplete

New functionalities

- New TRUEBIDIR functionality allowing performing automated bi-directional OTDR measurements with setup and results transfer through the fiber under test
- Ability to sequence automated bi-directional IL/ORL and TrueBIDIR OTDR Improvements
- MPO switch management sequencing 12 FiberComplete measurements and auto-detecting MPO cable polarity type.