

MOBILE LABORATORY OF OPTICAL FIBRE COMMUNICATION NETWORKS

LONET

The **LONET** laboratory is the ideal solution for fast and precise quality checks in the field. It is equipped to perform the following:

- *Transport service crew members to field operations*
- *Installation of optical fibre communication networks*
- *Efficiency inspection of optical fibre communication networks*
- *On-site monitoring, identification of faults and reconstruction of optical fibre communication networks*
- *Inspection testing of fibre optical cables and measuring of optical fibre communication networks characteristics during operation*



CHASSIS

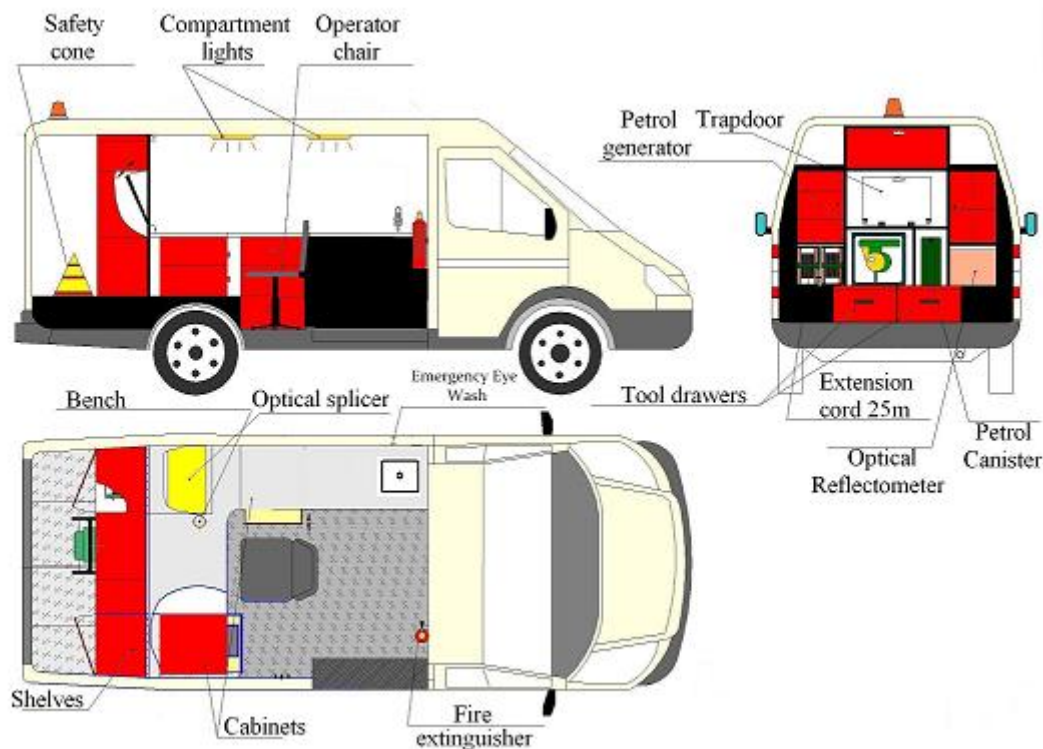
The basic types of chassis used are: Mercedes Sprinter, Iveco Daily, Ford Transit etc.



CARBODY

LONET laboratories are designed to be easy to operate and service. They are equipped with high quality insulated wall panelling and air conditioning.

The body is divided into technical and operator compartments separated by a partition wall. The technical compartment includes all the necessary tools and equipment for carrying out repairs and inspections. Safety is an important feature of the laboratories and hence all equipment is properly mounted and secured for transit. The operator compartment provides a pleasant environment to work in with more room and plenty of storage. It is equipped with cabinetry and workbenches that increase the operators' efficiency and productivity.


LONET DESIGN VIEWS

MAIN LABORATORY EQUIPMENT

1 Optical Fiber Fusion Splicer Fitel S178A

The S178 Hand-Held Core-Alignment Fusion Splicer is the latest, state-of-the-art addition to the S17X series of splicers. By combining speed, precision, durability and portability in one unit, the S178 Fusion Splicer ushers in an entirely new range of applications for core alignment splicing.

Equipped with a new alignment system that can save up to 20% on splicing time, the S178 Splicer's improved heating mechanism can also reduce protection sleeve shrink time by more than 30%. In addition, a newly incorporated USB 2.0 interface speeds PC communication and image/video transfer, while enhancing reliability.

Although the S178 Fusion Splicer is significantly smaller and lighter in weight than previous models, its canopy design, durable metal body frame and rubber protection corners provide robust protection, enabling use in demanding environments without compromising splicing performance. Along with its rugged durability, the splicer also offers convenience. A new battery system allows up to 200 splicing cycles (splicing/heating) before additional batteries are needed, and an innovative, mirror-free alignment system makes maintenance work a snap.



FEATURES

- Rugged and compact handheld design endures harsh environmental conditions
- Fast splicing (7 seconds) at super low loss and fast heating (25 seconds)
- 200 cycles (splicing & heating) with new battery configuration
- Available for all METRO/LAN/FTTX fibers including ultra bend-optimized fibers
- Splicer is compatible with the OFS, Diamond and Seikoh Giken Splice-on-Connectors
- Easy maintenance – Easy electrode replacement/mirror-free alignment system
- Easy software upgrade via the Internet
- Easily exchanged fiber holder systems (tight holder/fiber holder/SOC holder)
- PC interface software to allow user management of splicing recipes and results
- Auto-start shrink sleeve oven feature
- Improved GUI to further enhance ease of use
- Large memory for storage of splice data (2,000) and images (100)
- RoHS compliant

2 SmartPocket Optical Test Kits

JDSU SmartPocket™ Optical Test Kits are the new generation of pocket-sized and rugged instruments to install and maintain fiber optic networks. All test kits are equipped with an optical power meter and a dual or quad-wavelength optical light source dedicated to power level, insertion loss measurement and continuity check.

SmartPocket includes: Power meter OLP-35, Laser Source OLS-35, soft bag, universal AC adapter, neck strap, operating manual, Alkaline battery mignon



FEATURES

- Essential optical test kits for Enterprise and Service Provider applications
- Certify standard, high dynamic and high power applications
- Auto-wavelength and TWINTest features for test time efficiency and error-free testing
- Permanent reference level storage

3 Visual Fault Locator FFL-100

Whether installing or troubleshooting, the Visual Fault Locator (VFL) is an essential tool that quickly and easily locates problem areas in fiber cables. By pinpointing the exact location of fiber damage, technicians can diagnose, troubleshoot, and fix the problem efficiently. The VFL is also used for conducting continuity tests and performing fiber identification.



FEATURES

- Compact, ergonomic design for ultimate portability
- Visible wavelength is 650 nm
- High powered laser (1 mW) for single-mode (> 7 km) and multi-mode (> 5 km) connectors
- Continuous or Flash illumination
- Universal connector interface for quick and easy connection
- 2.5 mm connector input
- Includes soft-sided carrying case with belt loop

4 Live Fiber Identifier FI-60

Inadvertently disconnecting active fiber during installation, test and troubleshooting is a common cause of dropped service. The FI-60 enables users to easily detect the optical signal without having to disconnect the fiber or disrupt network traffic. Its unique SafeCheck system ensures safe and repeatable engagement with most fiber types, without the hassle of changing out costly dies.



FEATURES

- Avoid network downtime and damage with repeatable SafeCheck easy-pull trigger system
- Get the job done faster with a single LFI head that is compatible with multiple cable diameters
- Increase reliability and avoid false readings with integrated ambient light shield
- Access cable in multiple environments with the compact ergonomic design

5 Optical Time Domain Reflectometer (OTDR) Test Platform MTS-6000

The MTS-6000 is a highly integrated test platform designed for all phases of the fiber network life cycle. It provides field service technicians with the highest levels of performance and upgradeability on the market today. The modular design of the MTS-6000 offers an extensive portfolio of test functionality with over 40 different fiber modules supporting a wide range of applications. The versatility of the MTS-6000 allows technicians to standardize using one type of test equipment and then introduce new testing capabilities in the field without incurring additional training or device costs.



FEATURES

- Compact, lightweight, and highly integrated platform
- More than 40 application modules already supported for multimode and single-mode
- Choose from IL/ORL, OTDR, PMD, CD, AP and /or WDM plug-ins
- Exceeds Telcordia specifications for ruggedness, drop testing, and extended battery life

6 Fiber Inspection and Test System

The HP2 Series inspection and test systems combine fiber inspection and optical power measurement into a single seamless handheld device. The result is a significant increase in workflow efficiency with a system that is easy, repeatable, and fast in performing essential tests in less than half the time it takes with other tools. The HP2 system provides high-quality image resolution in a compact, portable design. The integrated power meter offers quick, easy, and convenient field measurement of optical power and attenuation. Easy push-button operation makes the device simple and straightforward, while the inspect-test process establishes optimal workflow practices.



FEATURES

- 3.5-inch TFT LCD to view clear, crisp, detailed images of fiber end faces with optimal resolution
- Inspects both sides of fiber interconnect, and accurately tests and measures optical power with one device
- Integrated functions and features eliminate switching between multiple devices
- Input for FBP series probe microscope and a dedicated patch cord microscope (PCM) let users quickly and easily inspect both sides fiber interconnects
- Integrated PCM eliminates need for changing inspection tips, prevents misrouting, and protects patch cords
- Integrated power meter (OLP-6/OLP-8) for all single-mode and multimode applications, such as LAN, telecom, CATV, and DWDM testing
- Modulation frequency detection lets users identify individual fibers at specific tones
- Three-year calibration period
- GripSwitch™ power-save mode activates the display when held in-hand and deactivates when released

7 Optical Talk Set

The SmartClass OTS-55 (optical talk set) fulfills today's communication needs during fiber installations, maintenance or troubleshooting in a very cost effective way by using one single "dark" fiber.

Headset free

The SmartClass OTS-55 provides clear digital voice transmission over a single fiber. Hands-free operation makes communication even more convenient for the technician by using either a headset or the "speakerphone" mode. No matter how you use it, the SmartClass OTS-55 provides crystal clear communication any time.

Flexibility

The outstanding performance of this talk set ensures not only a communication between two SmartClass OTS-55. Indeed, its flexibility allows operation together with the MTS/T-BERD 6000/8000 as well as the OFI-2000 tester (when equipped with talk set functionalities).

FEATURES



- Market's first unit, that doesn't need a headset for hands free operation
- ≥ 45 dB dynamic range
- Wavelength of operation: 1550 nm
- Clear digital voice transmission
- Hands-free operation
- 4-way powering
- Visual fault locator option at 635 nm
- Economical option for fiber tracing, routing, and continuity checking
- Universal push-pull adapter 2.5 mm

8 Standard Fiber Optic Install Tool Kit

The SP1-SPC35C Fiber Installation Tool Kit comes in a heavy-duty black polyethylene Roto-Rugged case with an integral luggage cart. It features beefed-up construction, extra-large corners, steel spring-loaded handle and quarter-turn latches. Low-profile rubber wheels are mounted on the side edge for smooth rolling. The recessed handle collapses flush with the edge. Hardware is hidden under a removable plastic tray in case bottom. Small metal rails on the underside protect the case from stair or curb damage. The 26-pound SPC35C measures 17.5" x 14.25" x 8.5" (inside dimensions). This specially designed kit features a versatile complement of tools and supplies that meets the multiple fiber optic installation requirements of field engineers. Every item was carefully chosen for universal applications.

Tool Kit Contents:



- 8.5" Black Luggage Cart Case
- General Purpose Cotton Swabs
- 2.5mm Economy Fiber Swab 50/pkg
- Fiber Optic Ferrule Cleaner
- Cotton Friction Tape 3/4" X 60'
- Dispenser w/ Wire Marking Tape
- Hand-Held Fiber Scope
- Two-Step Coax Cable Stripper, Up to 1/8" Cable O.D.
- Cable Sheath Cutter
- Seam Ripper
- Lint-Free Alcohol Wipes

- Fiber Splinter Removal Tweezer
- Rotary Cable Stripper
- Tubing Cutter, 1/8" to 1-1/8"
- 6" Diagonal Cutting Plier
- 6" Standard Long-Nose Plier with Side Cutters
- 9" High-Leverage NE SideCutter
- 8 11/32" Cush.-Grip Screwdriver
- Phillips Screwdriver #1
- Phillips Screwdriver #2
- Power-Return Rule 12' X5/8"
- High-Leverage Cable Cutter
- Four-Ounce Pump Bottle
- Low-Cost Splicer's Snips
- Retractable Utility Knife
- Desoldering Bulb
- Nutdriver 5/16"
- Nutdriver 11/32"
- Nutdriver 3/8"
- Nutdriver 7/16"
- Nutdriver 1/2"
- Multi Wire Stripper/Cutter 10-20 AWG
- Kevlar Cutter
- 250 Micron Buffer Stripper
- 3mm Fiber Optic Buffer Stripper
- Fine Point Black Sharpie

9 Power Generator EISEMANN

This modern gasoline generator is ideal for independent work on construction sites and for industrial, commercial or private operation. With a large fuel tank it guarantees up to 8 hours running time and offers excellent performance and at the same time it is very safe to use.



TECHNICAL SPECIFICATIONS

Engine:	Honda GX 390 Super Silent
Cylinder:	1
Speed:	3000 rpm
Fuel:	Gasoline
Engine oil capacity:	1.3 l
Cooling (Eng./Generator):	Air / Air
Electr. capacity 1~ φ 1.0:	6450 VA
Voltage 1~:	230 V
Max. Current 1~:	28 A
Current 1~ (CEE):	28 A
Current 1~ (Schuko):	16 A
Max. starting current cos φ	16 A
0,6:	
Starting current with 20% voltage drop:	45 A



Number ΦΠΑ (VAT) 10132211L

Holding company "EMZ"
Head office and Factory:
Free Trade Zone, Kalo Chorio,
Larnaca, Cyprus
RN HE 132211; IN 9.84

Frequency:	50hz
Tank capacity:	20 l
Weight:	95.5/104.5 kg incl. batt.
Dimensions (L x W x H) :	740x500x530 mm
Acoustic power L_{WA}:	97 dB(A)
Acoustic pressure (10m no load):	69 dB(A)

DOCUMENTATION

Set documentation of the laboratory is included.

WARRANTY

Our laboratories are covered by a warranty for a period of one year. At the end of this period, the manufacturer can provide upon request an after-sales service of the equipment.

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