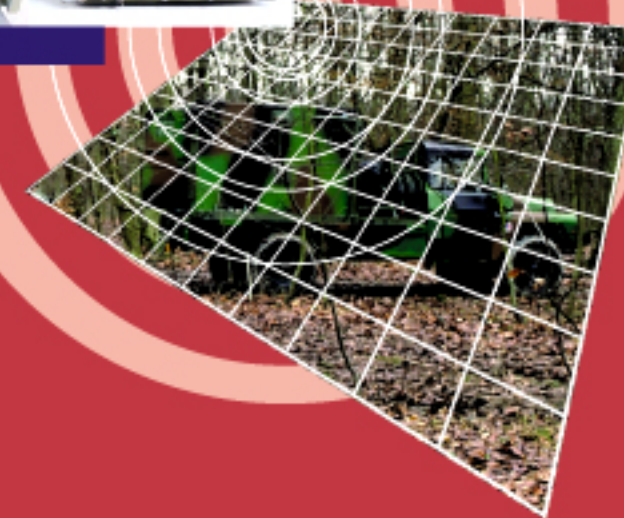


PRODUCT ASSETS



- Low cost solution
- Latest technology used for the 2 versions
- Advantage of fiber optic cable : no electromagnetic radiation
- Application for transmission Switch/Switch through Radio Relays, SATCOM, leased trunk, Switch/PBAX,...
- Various link extensions and interfaces (electrical bit rates up to 8 Mbps)
- Transparent Digital EOW (EUROCOM D/1 G)
- Modularity at module level
- Fully adaptable (traffics interface changeable, number of modules,...)
- Easy to use "plug and play"
- Optimal Service to the customer(1 Y warrantee, changeability by the customer,...)

**OLTU**

OPTICAL LINE TERMINATING UNIT

THALES**THALES**

OLTU

OPTICAL LINE TERMINATING UNIT

When we look at an extended network in a nowadays operational theater we obviously have to face the following new priorities : high data transmission rate, higher distance before using RF relays : up to 4 km, more reliable network, interoperability of military and/or civilian equipments (bulk encryption, PBX, SATCOM...),

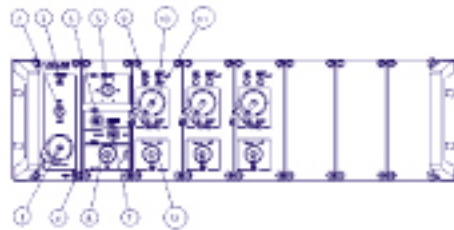
... Equipments needs also to be easy to use, low life cycle costs, scalable, miniaturize and "upgradable"

The OLTU is the perfect response to these nowadays requirements.

Moreover it provides different solutions and significant advantages over copper 4 wire cables : less weight, easy to handle, radiation free, much higher bit rate...

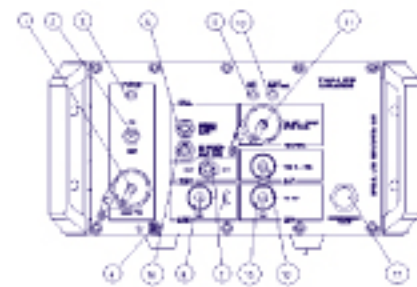
The Optical Line Terminating Unit provides rugged field deployable electric/optic conversion and transmission of electrical signals up to 4 km.

The product exists in a 19 inch configuration for shelter use and a 9.5 inch configuration for field deployable applications.

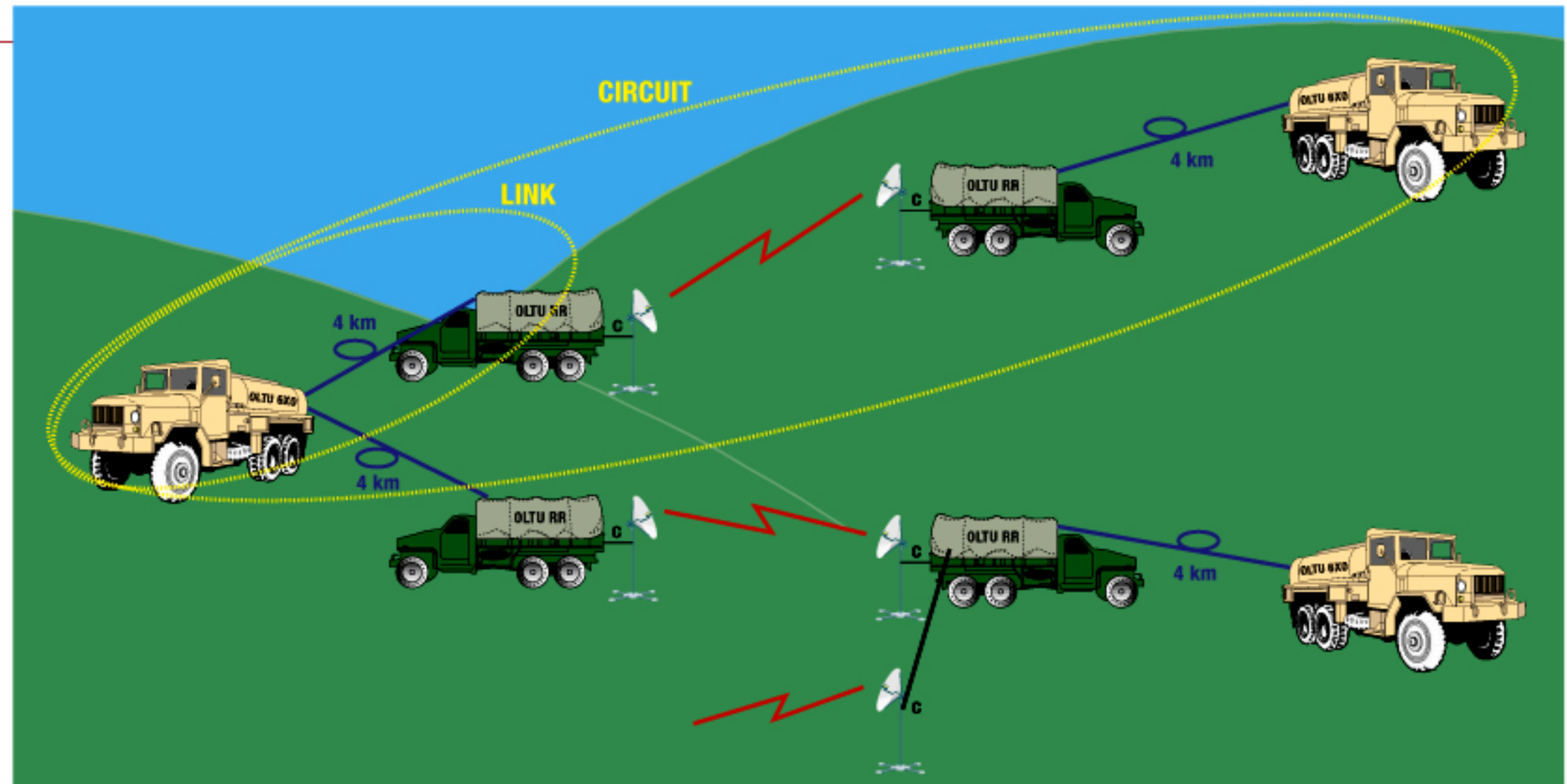


19 inch OLTU

- The 19 inch OLTU product can be equipped with 1 up to 6 OLTU modules (links)
- Each module independent from the other
- One handset available to the operator for Engineering Order Wire communications (EOW)
- A switch on the front panel selects the module the operator has access to



- 9.5 inch OLTU which is equipped with only one OLTU module.



Traffic Interfaces

- One traffic channel (T) per module with choice between:
 - 256, 512, 1024 and 2048 kbps EUROCOM D/1, interface B
 - V.11 / ITU-T G.703 2048 Kbit / 8448 Kbit - 64 Kbit granularity
 - Automatic bit rate selection
- Selection of the channel done by the strap in the connector plug
 - MIL 38999 compatible connector
 - option: customer defined interface

Auxiliary interfaces

- One auxiliary channel (A) per module
- Two types of electrical interfaces can be used:
 - 1k - 64kbps transparent V.28
 - 1k - 64kbps transparent V.11
 - option: customer defined interface

Engineering Order Wire (EOW) Interface

- Three types of electrical interfaces can be used:
 - Transparent Digital EOW (EUROCOM D/1 G) on the complete circuit
 - 1k - 64kbps transparent V.28
 - 1k - 64kbps transparent V.11
 - option: customer defined interface
- One common EOW interface is foreseen which is used by all OLTU modules

- Handset interface (E1) with Push To Talk
- The voice is CVSD coded
- Operator calling is by means of a button on the front panel
- On the receive side the call announced by an audible and visual indication
- In option: customer defined interface

Optical Interface

- Optical transmission is over two 50/125 μm MULTIMODE fibers
 - one transmit / one receive
- Optical budget better than 20db under all operating conditions
- Optical Frame: STANAG 4290 frame for international tactical optical gateway
- Connectors:
 - 19 inch OLTU: shell size 11, MIL38999 compatible, multichannel fiber optic connector
 - 9.5 inch OLTU: Amphenol CTOS 976 tactical multichannel expanded beam connector
 - In option: other tactical and expanded beam connectors

Control and Alarms (easy to use)

- Built in test equipment per OLTU module
- Remote test and optical cable test per OLTU module
- Alarm indication on front panel

Power Supply

- Voltage:
 - 110/230 VAC or 24 VDC
- Power consumption:
 - 19 inch OLTU: 70 Watt max.
 - 9.5 inch OLTU: 30 Watt max.

Physical Characteristics

- 19 inch OLTU
 - : 133mm x 19inch x 400mm
 - Weight 19 inch OLTU: 15 kg
 - 19 inch OLTU to be installed in shelter, in 19 inch rack, in stand alone or in vehicles
- 9.5 inch OLTU
 - Dimensions (HxWxD): 133mm x 9.5inch x 400mm
 - Weight 9.5 OLTU: 8 kg
 - 9.5 inch OLTU can be used under field tent, stand alone or in shelter

Environmental Characteristics (standard and well known)

- Temperature Range:
 - -40 to +55 C Operating
 - -55 to +70 C Storage
- Climatic: According to MIL-STD-810E
 - 19 inch OLTU: Drip proof
 - 9.5 inch OLTU: Rain proof
- Mechanical: According to MIL-STD-810E
- EMC: According to MIL-STD-461D
- EMP: Designed to withstand, without degradation, the effects of EMP.