



## Trans Max™

### Trans Max 4100 (TM4100) Field Optical Amplifier



#### ■ More Customers, More Reach

- C-Band optical amplification for reach up to 100 km in downstream architectures
- Allows for cascadable architectures
- Optional optical A/B switch module for support of redundant optical configurations

#### ■ Deploy Faster

- Single unit accommodates up to 6 transport fibers
- Supports multiple wavelengths on as few as a single fiber with CORWave™ II multi wavelength forward transmitters and bidirectional optics

- Commonality with the Opti Max™ 4100 optical node reduces sparing and inventory SKUs and allows conversion from an Opti Max4100 node to a TM4100 optical amplifier configuration if needed

- Dual redundant load sharing power supplies

- No special accessories are required for set up – local configuration control available using the craft GUI

- Remote monitoring capability

Synchronizing critical new elements into a cable operator's already deployed network ensures that the operator's capital investment can scale with subscriber growth or marketing initiatives seamlessly, cost-effectively and quickly.

#### Reach More Customers in Long Haul Networks

The TM4100 C-Band optical amplifier is an essential part of HFC long haul networks for optical amplification of signals up to 100 km. This field optical amplifier extends the reach of C-Band optical signals using robust GMOD transmitter technology and can be cascaded in series. An optional optical A/B switch module provides high performance network protection and optical redundancy for improved customer Quality of Experience (QoE) by supporting redundant optical configurations. Functions include automatic, manual and remote switching, and AC or DC redundancy power supply.

#### Faster Time to Revenue

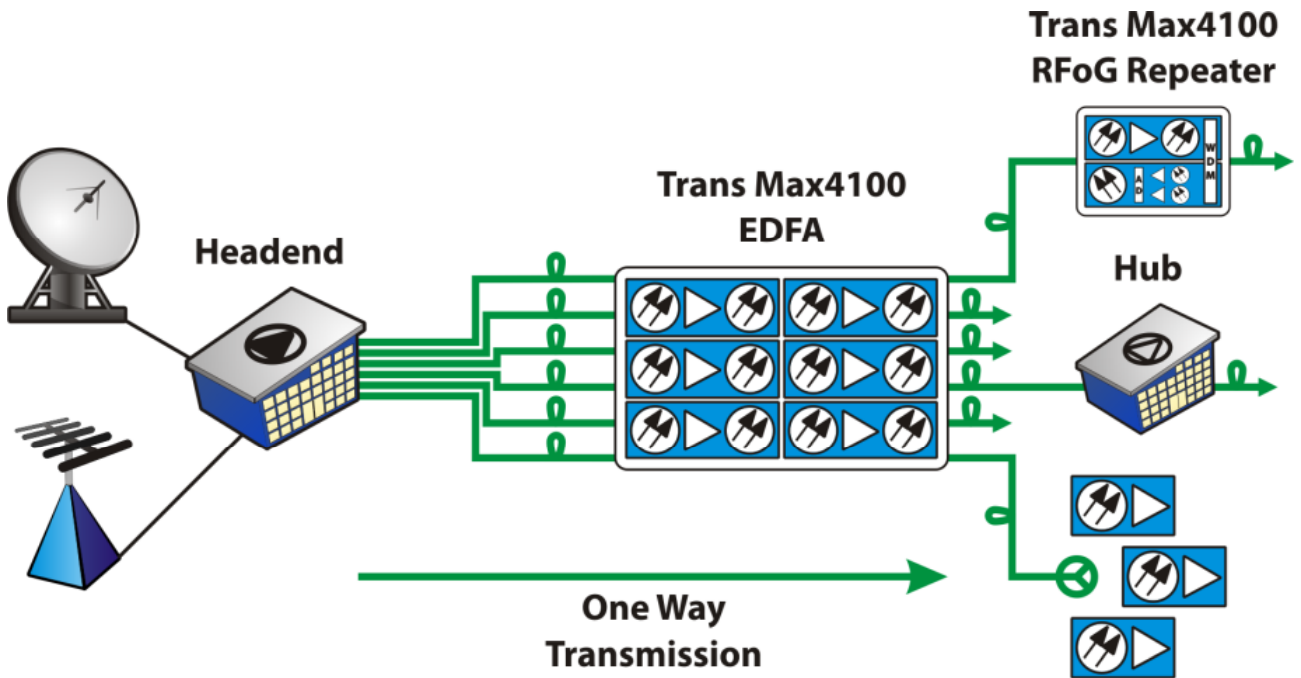
A single TM4100 optical amplifier can be configured to accommodate up to 6 transport fibers and supports bidirectional optical architectures for forward and return transport. When utilized with CORWave II forward transmitters, multiple wavelengths can be supported on as few as a single fiber if desired. Modules include single output with constant gain or constant power at 17 or 21 dBm, single output with constant gain at 20.5 and 23.5 dBm, or a dual output with constant power at 19 dBm per port. No special RF accessories are required for set up of the optical amplifier – configuration and monitoring is done via the craft GUI. Customized optical passives platforms support a wide range of optical designs and facilitate ease of installation.

#### Lower OPEX with Reduced Inventory SKUs

Commonality with the Opti Max4100 (OM4100) node reduces sparing and inventory SKUs of the housing, power supply modules, return transmitters, EDFA modules and interface board. This commonality also allows conversion from an OM4100 node configuration to a TM4100 optical amplifier if needed.

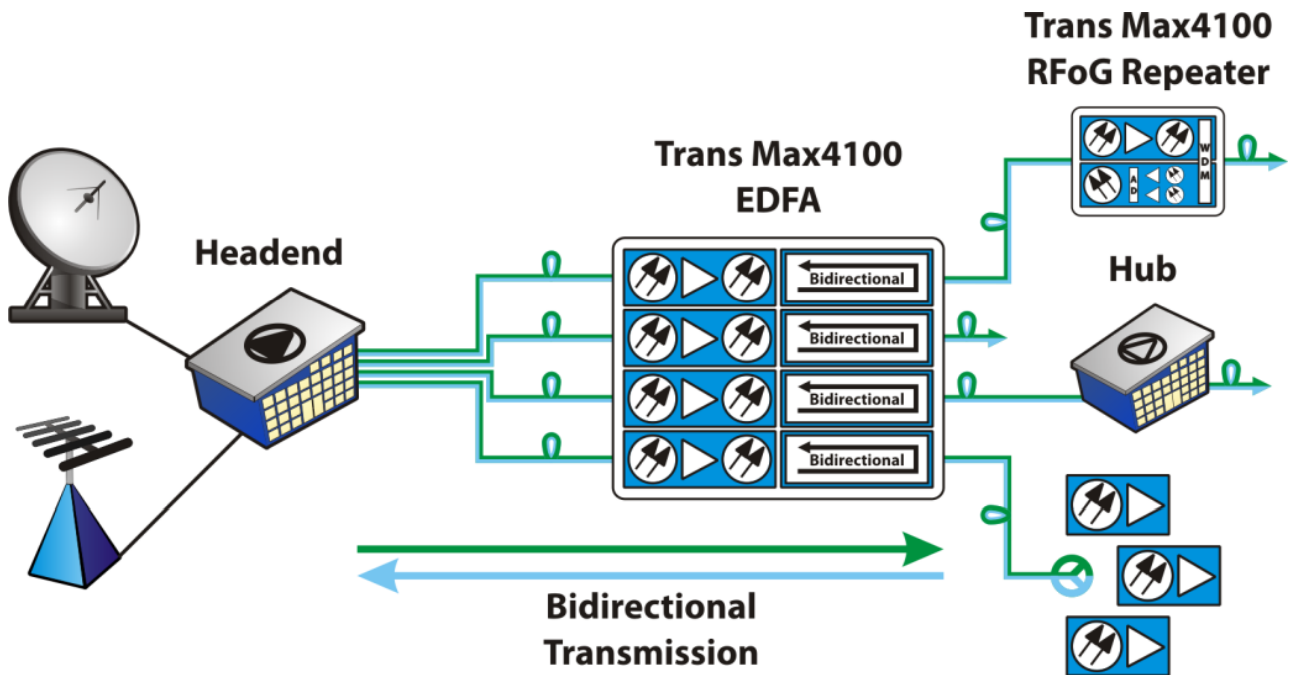
**One Way (per fiber) Operation:**

The TM4100 configured as a field hardened optical amplifier can support up to six EDFAs in a Trans Max housing when configured for one-way transmission. This allows the field optical amplifier station to manage up to six transport fibers at a single location. The optical amplifier in this illustration is configured to handle six transport fibers that could be used to feed additional hub sites, RFOG repeater service groups, or groups of HFC optical nodes. Each module can have signals flowing from left to right or right to left within the same housing.



**Bidirectional (per fiber) Operation:**

The TM4100 configured as a field hardened optical amplifier can support up to four EDFA modules (up to 3 EDFAs with EMS), and associated bidirectional optical passive modules, in a TransMax housing when configured for bidirectional transmission on each fiber. This allows the field optical amplifier station to manage up to four bidirectional transport fibers at a single location. The optical amplifier in this illustration is configured to handle four transport fibers that could be used to feed additional hub sites, RFoG repeater service groups, or groups of HFC optical nodes bidirectionally.



# Trans Max4100 Field Optical Amplifier

## ARRIS Solutions

ARRIS solutions for coax architectures include the OptiMax4100 and 3100 segmentable nodes, 1 GHz GMODs, the CORWave and CORWave II multi wavelengths transmitters and digital return receivers, the TM4100 RFoG Repeater, and a full range of customizable optical passives. Please contact your ARRIS sales professional for more information on these products.

[www.arrisi.com](http://www.arrisi.com)

Find more information about the Trans Max4100 Field Optical amplifier.

- Product Specifications—Trans Max4100 Hardened Field Hub Quick Reference Guide (Part #: 1505838)

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