

## Applications

- Network Simulation
- Equipment Testing
- Calibration
- Training
- Delay Line Applications

## Features

- Lengths from 10m to 200km\*
- Fusion splicing and/or physical contact
- Multiple fiber and connector options
- Rack mountable and self-contained portable enclosure options
- Actual distance spooling for precise "natural" attenuation

## Benefits

- Standard and custom lengths
- SM and MM fiber types
- SC, LC, ST, FC, MU connector options for easy integration to existing systems
- Multiple boxes can be joined using interconnect sleeves
- Enclosure options allow for increased product versatility

## About Timbercon

Timbercon, Inc., founded in 1997, is a fiber optic product and solution manufacturing company providing a variety of connectivity solutions to the defense, aerospace, medical, data storage, telecommunications, industrial, broadcast and networking industries. In addition to standard fiber optic assemblies and attenuated loopbacks, Timbercon has pioneered many proprietary products. Additional company information can be found at [www.timbercon.com](http://www.timbercon.com).

## Overview

Designed to provide an easy and efficient means for testing, analysis, demonstration, training and delay line applications. Network simulation modules are available in multiple lengths, channel counts and channel bridging options for increased flexibility. Connector type, fiber type, and enclosure type options allow each module to be easily integrated into new or existing systems.

The network simulation module comes with documented performance specifications including insertion loss, attenuation/Km of fiber, actual distance and dispersion slope.

For all channel bridging applications, Timbercon master calibration cables are recommended to reduce insertion loss associated with standard patch cord usage.

Network simulation modules are the ideal choice of testing applications. They produce "natural" attenuation by spooling the actual distance of fiber inside the module, virtually eliminating attenuation variances often associated with VOA (variable optical attenuators).



## Standard Configurations

- TM-701-00031**  
Network Simulation Module - 300m (300m x 1 Channel), LOMMF 50µm, SC/PC
- TM-901-00002**  
Network Simulation Module - 10km (10km x 1 Channel), SM 9µm, SC/APC
- TM-901-00003**  
Network Simulation Module - 20km (20km x 1 Channel), SM 9µm, SC/APC
- TM-901-00011**  
Network Simulation Module - 20km (20km x 1 Channel), SM 9µm, FC/UPC
- TM-904-00016**  
Network Simulation Module - 100km (25km x 4 Channels), SM 9µm, SC/UPC
- TM-908-00042**  
Network Simulation Module - 200km (25km x 8 Channel), SM 9µm, SC/UPC
- TM-901-00004**  
Network Simulation Module - 30km (30km x 1 Channel), SM 9µm, SC/UPC
- TM-901-00024**  
Network Simulation Module - 50km (50km x 1 Channels), SM 9µm, FC/UPC
- TM-904-00015**  
Network Simulation Module - 200km (50km x 4 Channels), SM 9µm, SC/UPC
- TM-902-00014**  
Network Simulation Module - 200km (100km x 2 Channels), SM 9µm, SC/UPC

## Performance

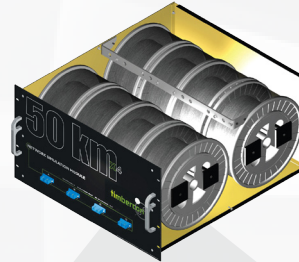
Insertion Loss (Typical)	SM	MM
FC, ST, SC, LC, MU	0.15 dB	0.35 dB
MTRJ	0.30 dB	0.30 dB
Attenuation dB/Km (Max) @ 850nm	-	3.5 dB
Attenuation dB/Km (Max) @ 1310nm	0.50 dB	1.0 dB
Attenuation dB/Km (Max) @ 1550nm	0.50 dB	-
Back Reflection (Typical)	≤-55 dB	≤-35 dB
Mating Durability (500 Cycles)	<0.20 dB	<0.20 dB
Temperature Range	-40°C to 85°C	-40°C to 85°C

## Construction

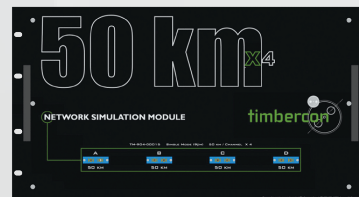
19" rack mount enclosure:  
8.0 lbs. to 35 lbs. depending on length

Portable enclosure:  
size / weight dependent on application

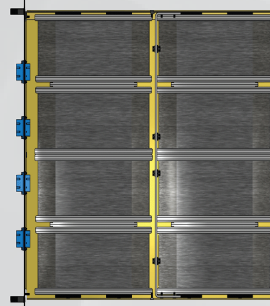
Inside View



Front View



Top View



Side View

