USB & Ethernet Controlled

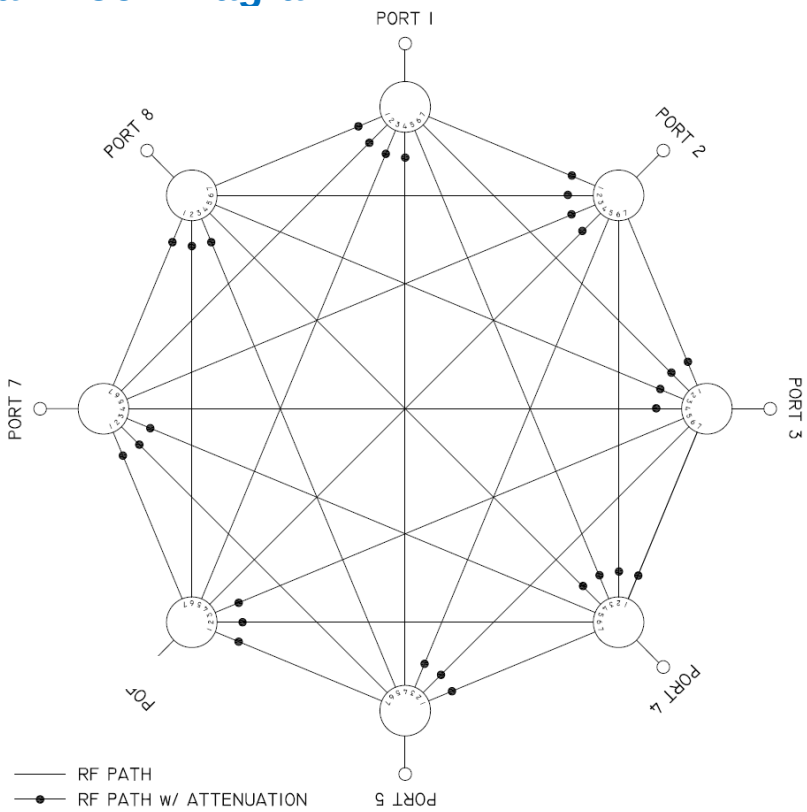
8-Port Mesh Network

ZTMN-0890A

50Ω 30-2000 MHz

Model Name	Connector Type
ZTMN-0890A-S	SMA female
ZTMN-0890A-N	N-type female
ZTMN-0890A-T	TNC female

Functional Block Diagram



Rev	Date	Description
X0	6-Oct-17	Initial datasheet prepared
X1	31-May-18	Spec updates
X2	10-Jul-18	Added connector options

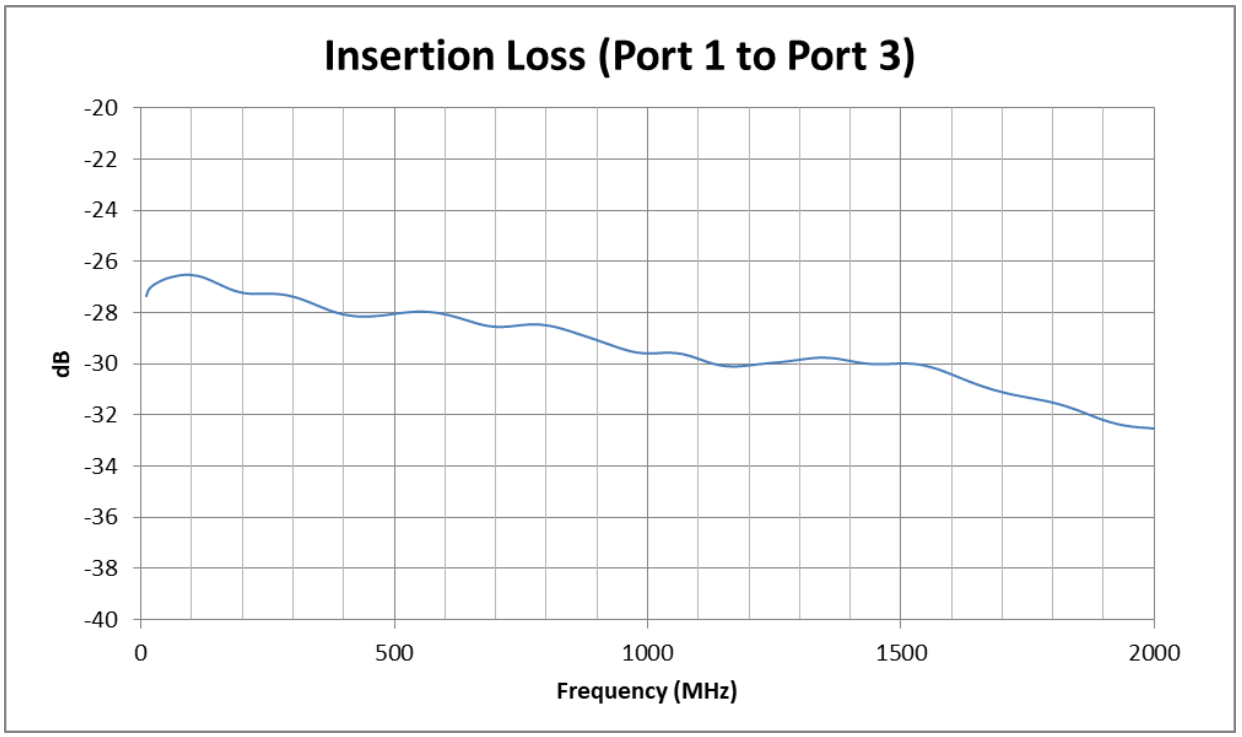
Mechanical Specifications

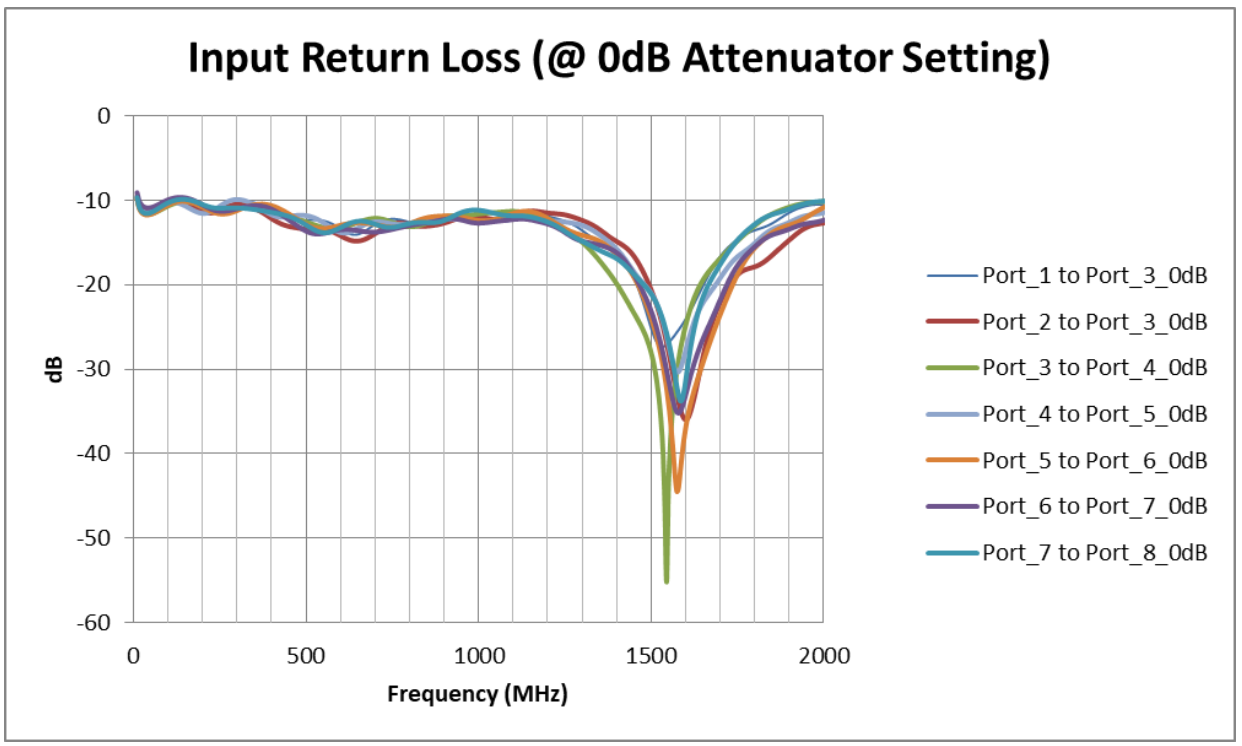
Dimensions	19” (W) x 2U (H) x 20” (D)
Case Material	Aluminum (with protective coatings to prevent corrosion)
Case Drawing	99-01-2312
RF Connectors	• ZTMN-0890A-S: SMA female • ZTMN-0890A-N: N-type female • ZTMN-0890A-T: TNC female
Front Panel Marking	a) Mini-Circuits part number b) 8-Port Mesh Network Tester
Front panel	a) 8 x RF ports b) ON/OFF switch with indicator light c) Carry handles
Rear panel	a) AC mains power supply input b) USB & RJ45 control connections c) Label with date code/serial number/MCL part# for traceability
Control Interface	USB and Ethernet TCP/IP supporting HTTP and TELNET protocols
Power supply	a) AC mains power supply (90-260 V, 47-63 Hz) b) 2A, 250V fuse rating
Operating temp	0° to +50° C

Electrical Specifications at 25°C

Parameter	Conditions	Min	Typical	Max	Unit
Frequency		30		2000	MHz
Insertion Loss			33		dB
Return Loss			10		dB
Attenuation Range	Per Path	0		95	dB
Attenuation Step Size	0 – 90 dB Range		0.25		dB
	90 – 95 dB Range		0.50		
Attenuation Accuracy	(See RC4DAT-6G-95 Datasheet for Details)		+/- 0.5		dB
Input Power				+27	dBm

Electrical Performance @ 25˚C





Software Specifications

Software & Documentation Download:

- Mini-Circuits' full software and support package including user guide, Windows GUI, DLL files, programming manual and examples are available on request
- Please contact testsolutions@minicircuits.com for support

Minimum System Requirements:

Parameter	Requirements	
Interface	USB HID & Ethernet (HTTP & Telnet)	
System Requirements	GUI	Windows 98 or later
	USB API DLL	Windows 98 or later and programming environment with ActiveX or .NET support
	USB Direct Programming	Linux; Windows 98 or later
	Ethernet	Windows, Linux or Mac computer with a network port and Ethernet TCP / IP support
Hardware	Pentium II or later with 256 MB RAM	

Application Programming Interface (API)

Ethernet Support:
- Simple ASCII / SCPI command set for attenuator control
- Communication via HTTP or Telnet
- Supported by most common programming environments

USB Support (Windows):
- ActiveX COM DLL file for creation of 32-bit programs
- .NET library DLL file for creation of 32 / 64-bit programs
- Supported by most common programming environments (refer to application note AN-49-001 for summary of supported environments)

USB Support (Linux):
- Direct USB programming using a series of USB interrupt codes

Full programming instructions and examples available for a wide range of programming environments / languages.

Graphical User Interface (GUI) for Windows - Key Features

- Connect via USB or Ethernet
- Run GUI in “demo mode” to evaluate software without a hardware connection
- View and set all attenuation channels independently or in groups
- Configure automated attenuation sweep or hop sequences for groups of channels
- Configure Ethernet settings
- Upgrade firmware