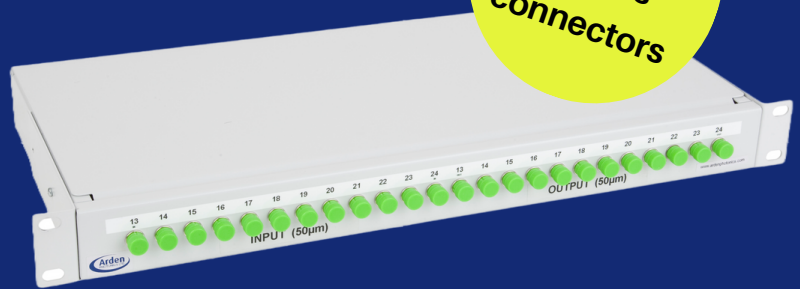


Options of various connectors

- Ideal for efficient testing of multi-fiber or ribbon structures
- Improves measurement repeatability in multimode fiber test
- EF compliant to IEC 61280-4-1
- Optimised for 850 nm and 1300 nm
- Works with all multimode fiber optic testers



### The ModCon Mode Controller

The ModCon Mode Controller is designed to ensure that whatever source you use to test the loss and bandwidth of your multimode optical fiber network, LED, Laser, OTDR or white light, you launch the same distribution of modes into the fiber. You can eliminate the variations due to the widely different modal characteristics of the sources commonly used in optical fiber measurements and networks.

Measurements of loss and bandwidth in multimode fibers are highly dependent on the modal condition of the light source used for the measurement. For example, OTDR and LS/PM loss measurements can differ significantly simply because an OTDR uses a laser source and not an LED.

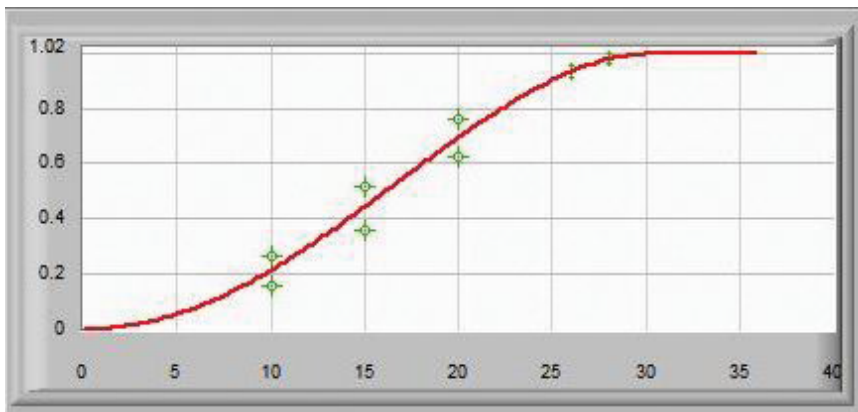
These widely different modal characteristics between sources used in measuring fiber optic systems and networks result in a large and source dependent uncertainty in the accuracy of measurements.

When using a ModCon, you launch the same distribution of modes into the fiber regardless of the source being used and consequently reduce the uncertainty in your measurements due to variation between sources.

In summary the ModCon increases the accuracy of measurements, gives better agreement between test data sets and is a simple and certifiable method of complying with international standards.

### 12-channel ModCon

12 Channel ModCons are ideal for modal conditioning 12 way switches or for efficient testing of multi-fiber or ribbon structures. Standard configurations are in a 19 inch rack, 1U high with either a single MPO style receptacle for the input and output, or with individual FC, SC, FCAPC, LC, LCAPC, and MTP connectors.



(Left)  
Plot of typical source showing compliance with the EF requirements in IEC 61280-4-1

Core Radius (µm)



# The ModCon

## 12-channel ModCon

### Technical Specifications

#### Physical

Weight	2 kg
Dimensions (Excluding Cabling)	48.5 cm X 25 cm X 4.4 cm
Enclosure	1U high 19 inch rack mountable

#### Optical

Maximum power throughout	10 mW
Insertion loss @850 nm	50 $\mu\text{m}$ < 3 dB; 62.5 $\mu\text{m}$ < 3 dB
Encircled Flux compliance to	IEC 61280-4-1: 2009
Connectors	FC, SC, FCAPC, LC, LCAPC, MTP Reference Grade
Component type	Passive
Min. bend radius for ModCon output and EF preserving cord	50 mm

### Ordering Information

Modcon	Description
MC-MW-12-FC/FC-50	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with FC connectors on input and output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-FC/FC-62	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with FC connectors on input and output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-FC/FCAPC-50	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with FC connector on input and FCAPC connector on output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-FC/FCAPC-62	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with FC connector on input and SCAFC connector on output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-FCAPC/FC-50	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with FCAPC connector on input and FC connector on output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-FCAPC/FC-62	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with FCAPC connector on input and FC connector on output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-FCAPC/FCAPC-50	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with FCAPC connectors on input and output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-FCAPC/FCAPC-62	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with FCAPC connectors on input and output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-FCAPC-50	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with FCAPC connectors on input and output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-LC/LC-50	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with LC connectors on input and output; 1U high 19 inch rack mountable enclosure.
MC-MW-12-LC/LC-62	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with LC connectors on input and output; 1U high 19 inch rack mountable enclosure.



# The ModCon

## 12-channel ModCon

### Ordering Information

Modcon	Description
<b>MC-MW-12-LC/LCAPC-50</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with LC connector on input and LCAPC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LC/SC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with LC connector on input and SC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LC/SC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with LC connector on input and SC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LC/SCAPC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with LC connector on input and SCAPC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LC/SCAPC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with LC connector on input and SCAPC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LCAPC/LC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with LCAPC connector on input and LC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LCAPC/LC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with LCAPC connector on input and LC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LCAPC/LCAPC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with LCAPC connectors on input and output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LCAPC/LCAPC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with LCAPC connectors on input and output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LCAPC/SC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with LCAPC connector on input and SC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LCAPC/SC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with LCAPC connector on input and SC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LCAPC/SCAPC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with LCAPC connector on input and SCAPC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-LCAPC/SCAPC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with LCAPC connector on input and SCAPC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SC/LC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with SC connector on input and LC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SC/LC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with LCAPC connector on input and LC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SC/LCAPC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with SC connector on input and LCAPC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SC/LCAPC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with SC connector on input and LCAPC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SC/SC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with SC connectors on input and output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SC/SC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with SC connectors on input and output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SC/SCAPC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with SC connector on input and SCAPC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SC/SCAPC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with SC connector on input and SCAPC connector on output; 1U high 19 inch rack mountable enclosure.



# The ModCon

## 12-channel ModCon

### Ordering Information

Modcon	Description
<b>MC-MW-12-SCAPC/LC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with SCAPC connector on input and LC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SCAPC/LC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with SCAPC connector on input and LC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SCAPC/LCAPC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with SCAPC connector on input and LCAPC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SCAPC/SC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with SCAPC connector on input and SC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SCAPC/SC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with SCAPC connector on input and SC connector on output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SCAPC/SCAPC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with SCAPC connectors on input and output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SCAPC/SCAPC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with SCAPC connectors on input and output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SCAPC-50</b>	Mode controller, 12 way in 50/125 $\mu\text{m}$ fiber with SCAPC connectors on input and output; 1U high 19 inch rack mountable enclosure.
<b>MC-MW-12-SCAPC-62</b>	Mode controller, 12 way in 62.5/125 $\mu\text{m}$ fiber with SCAPC connectors on input and output; 1U high 19 inch rack mountable enclosure.

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