

# The **ModCon** Mode Controller

Manufactured by



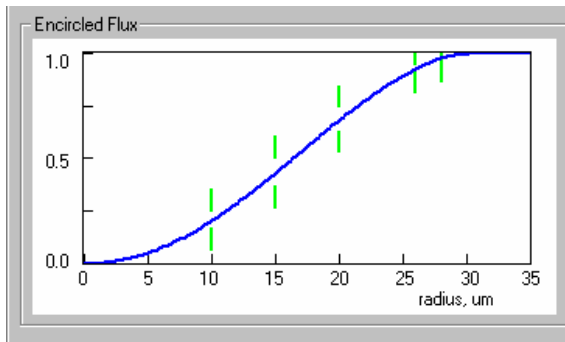
For source independent mode control fit the **ModCon** to your light source and

- Improve your measurement accuracy
- Ensure stable launch conditions for multimode fiber measurements
- Meet EF requirements of IEC 61280-4-1

Measurements of loss and bandwidth in multimode fibers are known to be 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.

Now there is a way to dramatically improve agreement AND ensure you meet international standards at the same time - the **ModCon**. The **ModCon** is a passive device which ensures that the correct launch conditions are achieved independent of the light source used. This results in more accurate measurements, better agreement between different test sets, and compliance with the IEC 61280-4-1. Every **ModCon** is tested using an MPX Modal Explorer to ensure that its output meets the standard regardless of the modal distribution of the input.

Simply fit the **ModCon** between the test set and the Fiber Under Test.



- Conforms to IEC 61280-4-1
- Operates at 850nm and 1300nm
- Reference grade connector on output
- Multiway versions available

Typical Encircled Flux plot measured using the Modal Explorer showing IEC 61280-4-1 template.


## Technical Specification

Insertion loss @ 850nm	50um	typically < 3.0 dB
	62.5um	typically < 3.0 dB


	Standard	OEM	OTDR	OTDR – rugged
Dims (mm)	100 x 50 x 25	87 x 42 x 12	165 x 105 x 32	240 x 190 x 110
Weight	185gm	80gm	380gm	1.3kg

## Ordering information


### ModCon – Standard

Standard ModCons come with a 1.2m input tail and a 1.5m output tail. The input and output cables have a 3mm diameter PVC sheath, and contain an Aramid yarn strength member.		
MC-FC-50-S	Mode control patchcord in 50/125µm fiber with FC connectors	
MC-FC-62-S	Mode control patchcord in 62.5/125µm fiber with FC connectors	
MC-SC-50-S	Mode control patchcord in 50/125µm fiber with SC connectors	
MC-SC-62-S	Mode control patchcord in 62.5/125µm fiber with SC connectors	
MC-ST-50-S	Mode control patchcord in 50/125µm fiber with ST connectors	
MC-ST-62-S	Mode control patchcord in 62.5/125µm fiber with ST connectors	
MC-LC-50-S	Mode control patchcord in 50/125µm fiber with LC connectors	
MC-LC-62-S	Mode control patchcord in 62.5/125µm fiber with LC connectors	

### ModCon – OEM

OEM ModCons have a smaller package (credit card sized), bare fiber tails and no connectors. They are intended to be used where space is limited e.g. inside other instrumentation or packaging. The fiber tails are 600mm long on input and output. The fiber is 250µm buffered, and has a 900µm loose buffer for 200mm from the case.		
MC-OEM-50-S	Mode control patchcord in 50/125µm fiber with FC connectors	
MC-OEM-62-S	Mode control patchcord in 62.5/125µm fiber with FC connectors	

### ModCon – MultiWay

Multiway ModCons are ideal for conditioning 12 way switches or for efficient testing of 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 12 discreet FC or SC connectors.		
MC-FC-50-S	Mode control patchcord in 50/125µm fiber with FC connectors	
MC-FC-62-S	Mode control patchcord in 62.5/125µm fiber with FC connectors	
MC-SC-50-S	Mode control patchcord in 50/125µm fiber with SC connectors	
MC-SC-62-S	Mode control patchcord in 62.5/125µm fiber with SC connectors	
MC-ST-50-S	Mode control patchcord in 50/125µm fiber with ST connectors	
MC-ST-62-S	Mode control patchcord in 62.5/125µm fiber with ST connectors	
MC-LC-50-S	Mode control patchcord in 50/125µm fiber with LC connectors	
MC-LC-62-S	Mode control patchcord in 62.5/125µm fiber with LC connectors	

The Modal Launch Conditions for our Telecomm modal controllers is specified in terms of the Encircled Flux (EF). A Certificate of Conformance or a Test Certificate(850nm only) giving details of how it was measured are available as options.

As well as our standard range of products we also make

- ModCons for Aerospace applications complying with 85/85 % launch conditions
- Ruggedised OTDR lead-in boxes containing ModCon mode controllers
- Customised Test boxes

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Specification may be changed without notice due to technical advances or component changes. Issue 20 June 2010