

The ModCon Mode Controller

For Aerospace

For source independent mode control fit the ModCon to your light source to:

- Improve your measurement accuracy
- Ensure stable launch conditions for multimode fiber measurements
- Meet 85/85% launch conditions



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 85/85% launch conditions called for in various aerospace standards. 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.

Technical Specification

General	
Insertion loss @ 850nm	50μm typically < 5.0dB 62.5μm typically < 5.0dB
Dimensions	165mm x 105mm x 32mm
Weight	380gm

The Modal Launch Conditions for our Aerospace modal controllers is specified in terms of the width of the Near Field Pattern at 5, 15 and 75% of the maximum. A Certificate of Conformance or a Test Certificate (850 and 1300nm) giving details of how it was measured are available as options.

Launch condition for Modal Controllers in 62.5/125 fiber

Intensity (% of max)	Maximum value (μm)	Minimum value (μm)
5	55	51
15	52	45
75	33	20

Launch condition for Modal Controllers in 50/125 fiber

Intensity (% of max)	Maximum value (μm)	Minimum value (μm)
5	44.0	40.8
15	41.6	36.0
75	26.4	16.0

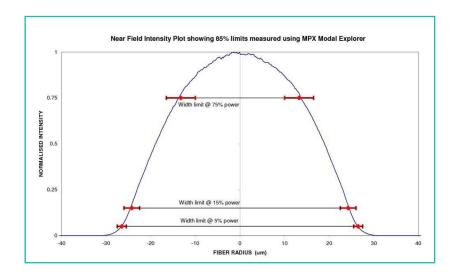
Ordering Information

The Modal Launch Conditions for our Aerospace modal controllers is specified in terms of the width of the Near Field Pattern at 5, 15 and 75% of the maximum. A Certificate of Conformance or a Test Certificate(850 and 1300nm) giving details of how it was measured are available as options.

MC-FC-50-E-85	Mode control patchcord with FC connectors in "Eurocard" case to deliver an 85/85% modal launch into 50µm core fiber from an 850 or 1300nm light source
MC-FC-62-E-85	Mode control patchcord with FC connectors in "Eurocard" case to deliver an 85/85% modal launch into 62.5µm core fiber from an 850 or 1300nm light source
MC-LC-50-E-85	Mode control patchcord with LC connectors in "Eurocard" case to deliver an 85/85% modal launch into 50µm core fiber from an 850 or 1300nm light source
MC-LC-62-E-85	Mode control patchcord with LC connectors in "Eurocard" case to deliver an 85/85% modal launch into 62.5µm core fiber from an 850 or 1300nm light source
MC-SC-50-E-85	Mode control patchcord with SC connectors in "Eurocard" case to deliver an 85/85% modal launch into 50µm core fiber from an 850 or 1300nm light source
MC-SC-62-E-85	Mode control patchcord with SC connectors in "Eurocard" case to deliver an 85/85% modal launch into 62.5µm core fiber from an 850 or 1300nm light source
MC-ST-50-E-85	Mode control patchcord with ST connectors in "Eurocard" case to deliver an 85/85% modal launch into 50µm core fiber from an 850 or 1300nm light source
MC-ST-62-E-85	Mode control patchcord with ST connectors in "Eurocard" case to deliver an 85/85% modal launch into 62.5µm core fiber from an 850 or 1300nm light source

As well as our standard range of products we also make:

- ModCons for Telecomms applications complying with IEC Encircled Flux launch conditions
- Ruggedised OTDR lead-in boxes containing ModCon mode controllers
- Customised Test boxes



For North American sales enquiries call (727) 478-2651 or email us on sales@ardenphotonics.com

For Rest of World sales enquiries call +44 (0)121 733 7721 or email us on sales@ardenphotonics.com