

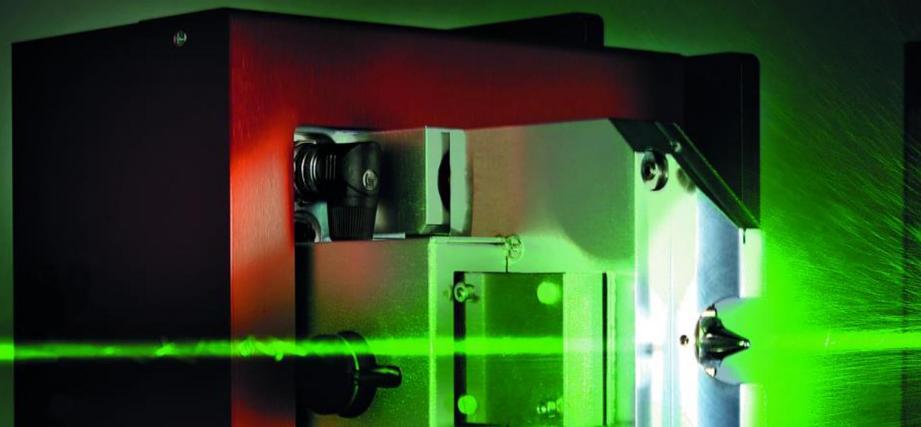


FocusMonitor FM+

PRIMES

- 長豐為Primes在台灣總代理，
享有最佳價格優勢，及最直接的技術服務。

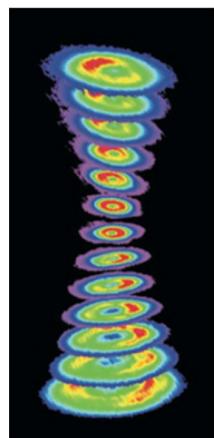
- Primes為國際雷射檢驗報告出處的企業，
雷射界的度量衡，具公信力、具精確性。



● 產品特點

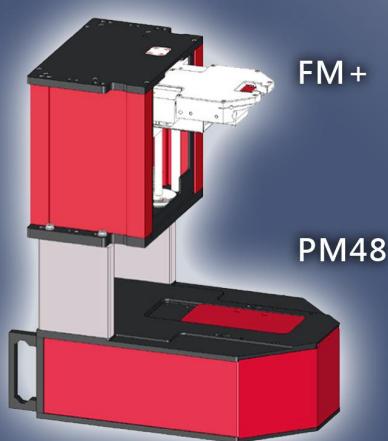
- 鍛接、切割時，精確知道焦點位置，幫助工藝上良率及克服機差做適當的補償。
- 切片式來觀察聚焦後的能量分佈確認光束品質是否完整及正確，確保加工品質。
- 可量測光束的幾何尺寸，驗證光斑是否尺寸正確。
- Z軸可自動測量至少四個以上的Raylaight Lengths.量測數據越多精度越細。
- 當設備空間限制時也可倒掛量測爭取量測機會。
- 蔊集數據後都可被記錄，並可做後處理的依據。
- 16位元的類比數位轉換器解析度高，數據更精確。
- 測量M²值，驗證雷射規格。

3D焦點量測

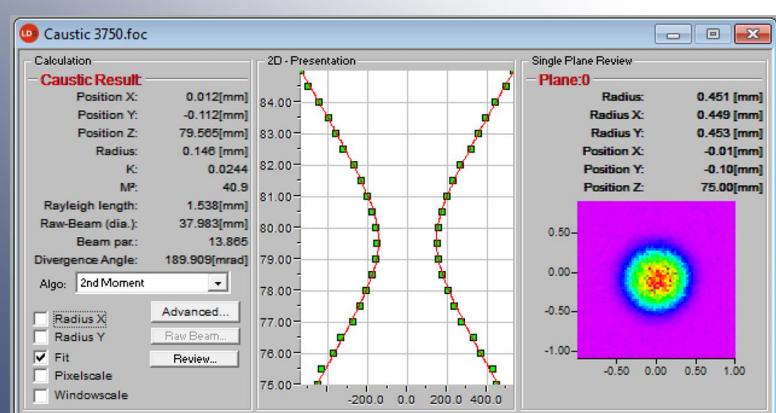


● FM+ + PM48

商品組合優惠價 請來電詢價



分析結果畫面



- FM可搭配PowerMeter48使用將可同時量測光束品質及雷射功率

訂購專線：(02)2881-3678

產品規格

Measurement Parameters

Power range	30 – 50.000W
Wavelength range	0.4 – 12 µm
Beam dimensions typ.	150 – 3000 µm (up to 5000 µm optional)
Option: Small focus dimensions	100 – 150 µm

Determined Parameters

Focus position x, y, z	yes
Focus radius x, y	yes
Beam propagation ratio M ²	yes
Measured Rayleigh length, typ.	28 mm
Raw beam diameter with focussing element	yes
Beam parameter product	yes
Divergence angle	yes
Peak power density in combination with PowerMonitor	CO ₂ laser (10.6 µm): 30 MW/cm ² , NIR laser: 10 MW/cm ²
Power density distribution	2D, 3D
Evaluation 86% (1/e ²)	yes
Evaluation 2nd moment	yes
Automatic measuring range > 4 Rayleigh lengths	optional
Measurement time per plane dependent on measured parameters (like resolution, rotation speed, position of measuring window)	5 s - 40 s

Function of the Measuring System

Working range x-y	8x8 mm (12x12 mm or 12x24 mm optional)
Working range z	120 mm
Measurement window sizes	0.1x0.1 – 8x8 mm (resolution 64 pixel)
Resolution	32x32 – 1024x1024 pixel
Rotation speed	1875, 3750, 7500 rpm ⁻¹
Line focus	yes
Linescan	optional

Supply Data

Power supply	24 V DC ± 5 %, max. 3.5 A
Protective gas	typ. 0.5 bar (option)

Communication

Interfaces	Ethernet
Trigger-delay port	optional

Dimensions and Weight

Dimensions (LxWxH)	280x242x218 mm
Weight (approx.)	8.5 kg

Environmental Conditions

Operating temperature range	+10 °C up to +40 °C
Permissible relative humidity (non-condensing)	10 – 80 %

Combination with the following detectors

Type	Laser	Detector
DFY-PS+	NIR/VIS	Photodiode
DFIG-PS+	NIR	Photodiode
DFCM+	CO ₂	Pyro detector

Rel. Amplification	Wavelength Range
programmable	0.4 – 1.1 µm
programmable	1 – 2.1 µm
1	9 – 12 µm

Combination with the following measuring tips

Type	Laser
NIR high div	Solid state lasers
CO ₂ high power	CO ₂ lasers
Diode	Diode lasers

Divergence	Power Density
up to 200 mrad	up to 10 MW/cm ²
up to 240 mrad	up to 30 MW/cm ²
up to 500 mrad	up to 1 MW/cm ²

More application specific detectors are available.