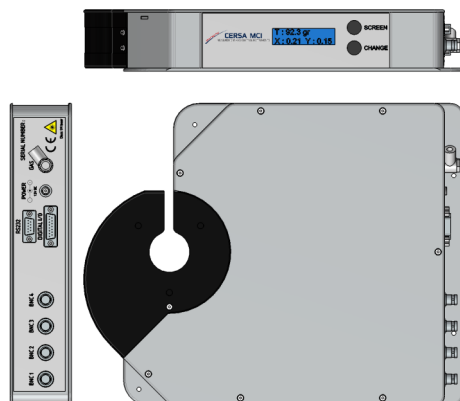


SPECIFICATIONS

NCTM Non Contact Tension Measurement

The **NCTM** is designed to measure the drawing force (tension) during optical fiber production. It uses a **pure optical principle** based on the glass birefringence (light polarization). Measurement capability from the startup to the end of the drawing.

The measurement is fiber position and vibration independent.



PRODUCT		NCTM
Performances		
Measurement window	Disk diameter	3.0 mm
Tension measurement	Measurement range	0 to 400 grams
	Uncertainty ^{*1}	Depends on the user's calibration
	Repeatability	+/- 0.1 gram
	Measurement rate	1000 measurements/sec
X&Y position measurement	Range	+/-2mm
	Uncertainty	+/-0.1mm
	Measurement rate	1000 measurements/sec
Vibration frequency measurement	Method	Compute by FFT
Communications		
Serial RS232 (SUB-D 9 pins)	Baudrate	115200
Digital (SUB-D 15 pins)	Digital output (open collectors)	8
	Digital input (length counting and reset)	2
Analogic output	BNC (+/-10V)	3
Environmental & general data		
Temperature	Ambient T°	10 - 40°C
	Max internal T°	55°C
	Storage T°	0 - 60°C
Laser source	Laser type	Class 1M
Power	Power supply	12Vdc 45W
Dimensions	Dimensions (LxWxH)	373.4 x 297 x 60.5 mm
	Weight	4.5 kg

Remarks:

¹ Maximum error due to the ambient temperature fluctuation: ±1 gr

Maximum deviation due to the fiber move: ±1 gr (within the measurement window)

Our NCTM are factory calibrated, but because the internal residual stress of the fiber can be different for each fiber type, we recommend to calibrate your NCTM.

Technical data are subject to change without notice