Including

FiberScanONE™ microwave consistency meter
HostXL™ PC software
120-220V multi-plug battery charger
12V battery charger for car
USB cable
Manuals
Reference glass
Aluminium carrying case for the instrument

MEASUREMENTS

Water grammage		Min	Max	Notes
Range	gr/m^2	0	50000	
Resolution	gr/m^2	5	20	A

A - 5 gr/m^2<10.000 gr/m^2, 20 gr/m^2>10.000 gr/m^2

Statics	
For single measure	Mean value, variance
For position	Mean value, standard deviation, CD profile

Instrument	
Measuring method	Microwave frequency resonance
Measuring area	6750mm^2
Microwave Field penetration	approx 50mm - 1,97in
Measurement rate	256 values/s (1024 values/s in FFT mode)
Resolution rate	12 bit
Memory	128 Mbyte
Dialogue languages	English
Rechargeable battery	Li-Ion
Operating temperature	0°-80°C (will not detect moisture in frozen materials)
Serial comm. port	Wireless BlueTooth™ or USB™

Results	
Measurement values	gr/m^2 H_20, lbs/ft2, % consistency, °C

MECHANICAL CHARACTERISTICS

Instrument	
Weight	3,2kg - 7,0lbs
Dimensions	Length 114/154cm - 44,9/60,6in (extendable) Thickness 5,3cm - 2,08in (data processing unit) Width 6,5cm - 2,56in (data processing unit)
Aluminium carrying case	76x32x16cm - 29,9x12,6x6,3in

Note: Excel, Windows and the appearing trade-marks are properties of their respective owners

CRISTINI FELTRI GC
Reliable Innovation™

Giuseppe Cristini S.p.A.
Diagnostic Instruments
Via Bombardieri 5,
24020 Fiorano al Serio (BG)
Italy

Tel +39 035 715111
Fax +39 035 711451
Email: fiberscan@cristini.it
Website: www.cristini.com

FiberScanONE™ is a registered trade mark of Cristini North America

Cristini Engineering

FiberScanONE™

The reference microwave consistency meter

Cristini Engineering

CRISTINI FELTRI GC
Reliable Innovation™

RADIATION FREE!

FiberScanONE™
Improve your process!

Savings. Trough process optimization.

Paper machines are complex mechanical mechanisms, and paper machine clothing can be seen as a "recorder" of most of the papermaking problems. FiberScanONE™ is a powerful tool to evaluate the forming section efficiency.
The instrument can be used to measure the water amount between the various dewatering elements along the forming fabric.
The results can be shown both in numerical and graphical form in real time on the display of the instrument. The data can be transferred wirelessly to any PC running the HostXL™ analysis software, provided with the unit. Drainage trends, optimization and efficiency of the chemicals used, moisture streaks, fabric cleaning, grammage pulsations, foil turbulence, are only a few of the analysis possible trough an appropriate monitoring of the forming section, with FiberScanONE™.
The regularity of the formation & dewatering impacts heavily on the performance of the paper machine, as it greatly affects the quality of the paper produced and the machine energy consumption.
A few hours of machine downtime avoided because of an appropriate machine monitoring, are enough to pay back the cost of a FiberScanONE™.

Four good reasons to invest in FiberScanONE™:
- **Helps reduce machine unplanned downtime;**
- **Powerful tool for troubleshooting and process optimization;**
- **Better evaluation of chemical performance and their consumption**
- **No limitations on maximum water thickness.**

Microwave technology, safe to use, freedom to travel

FiberScanONE™, is the world's first microwave consistency meter. The instrument uses a unique multi-patented microwave technology, which allows precise consistency measurements of the water thickness, up to 50mm (1,97in, 50000gsm). Therefore there are no limitations on machines producing boxboard or pulp, where the slice opening is often higher than 30mm. The superior precision and repeatability of its proven microwave technology, allows an extremely reliable data collection, when compared to other technologies. Additionally, the accuracy of the instrument further improves exactly where needed, close to the couch roll.
FiberScanONE™ measures purely the water grammage, therefore the effect of the forming fabric mass on the readings is minimal, and can be accurately measured by the instrument.
These unique features make FiberScanONE™not only the real substitute to the gamma backscattering technology, but a dramatic improvement in data reliability and measurements possibilities.
The instrument doesn't emit any ionizing radiation, therefore it is safe to handle and doesn't require costly licences to be used nor permission to travel.

Ergonomy matter

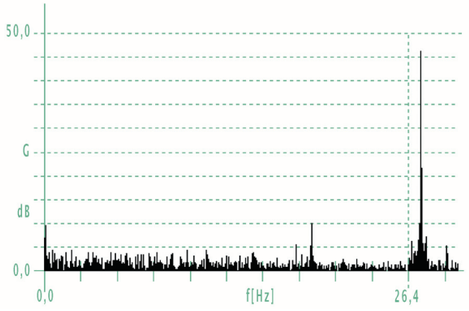
When we go to the drawing board, we always have the operator safety in mind. Designing FiberScanONE™, we had 2 safety targets: best ergonomic design and minimal weight. The result is the lightest consistency meter available on the market (3,2kg - 7,0lbs), very easy to handle in all the situations, with the possibility to extend its length, to reach the most difficult positions found in the forming section.

HostXL™, the powerful tool for data analysis and storage

FiberScanONE™ comes equipped with HostXL™ software. The data sampled can be transferred wirelessly or via USB to any Windows™ PC.
With HostXL™ the data are automatically copied into the drainage chart, for maximum ease of use. They can be compared and plotted together with previous measurements made on the same machine, relating them with the machine scketch (design tool included) and data collected in the press section. The software allows the possibility to plot Cross Direction profiles. HostXL™ includes a dedicated FFT analysis, to troubleshoot grammage pulsations and foil turbulence. The data can be saved in Excel™ format for additional elaboration, and exported to other PCs running HostXL™.

Speed matter, FFT analysis

The instrument design has been developed to obtain the maximum operating flexibility.

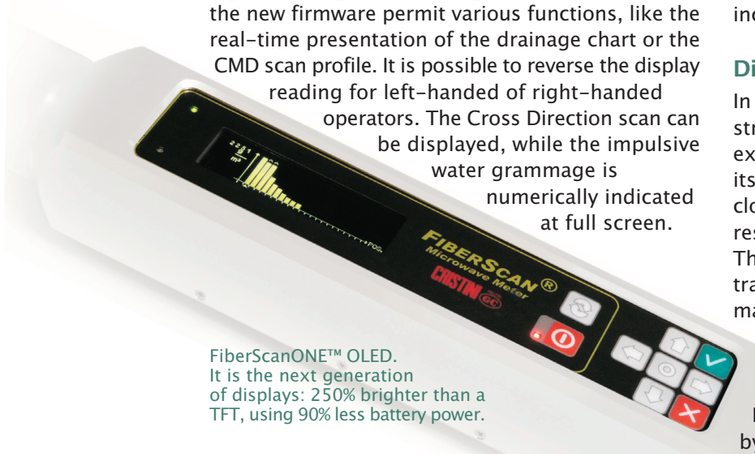


HostXL™ FFT module easily troubleshoots grammage pulsation and turbulence in the forming section.

FiberScanONE™ is the fastest consistency meter on the market, able to sample 1024 moisture data per second (in FFT mode).
The high sampling speed allows obtaining an outstanding resolution, when conducting FFT analysis and/or evaluating foils turbulence and pulsation trough consistency sampling. This feature makes FiberScanONE™ the ideal instrument for analysis on high speed paper and pilot machines.

OLED display

FiberScanONE™ uses a new OLED display (Organic Light Emitting Diode). The graphical display and the new firmware permit various functions, like the real-time presentation of the drainage chart or the CMD scan profile. It is possible to reverse the display reading for left-handed of right-handed operators. The Cross Direction scan can be displayed, while the impulsive water grammage is numerically indicated at full screen.



FiberScanONE™ OLED.
It is the next generation of displays: 250% brighter than a TFT, using 90% less battery power.

Leading the Way

More than five years ago, FiberScan™ introduced for the first time to the market the revolutionary microwave technology, changing forever the principles of the consistency meters, setting what is now a standard in the PMC Industry. Today, the FiberScan™ safety and accuracy advantages are so obvious that its advanced technologies are in the research sight of companies producing diagnostic instruments.

Full upgrade = protecting your investments

Diagnostic instruments are an important investment. When we engineered the FiberScan™ series, one of the strong points was the possibility to upgrade the instrument hardware to the next generation models. When available, the firmware upgrade is free of charge. These are a unique features, which can impact positively the bottom line of your investments cost.

Two unique service packages: ZDR (zero downtime replacement)

FiberScanONE™, as with all Cristini diagnostic instruments comes equipped with an exclusive service package: the instrument can be substituted free of charge, with an equivalent model, during repairing times. The instrument down time is then only reduced to the delivery of a spare unit.
Our instruments are available in over 30 countries, for immediate substitution.
Ask your instrument supplier if he can match this.

SAI (service all included)

FiberScanONE™ SAI is an all-inclusive service package, at the cost of an annual fee.
The service includes all repair time, material and includes spare parts.

Diagnostic instruments, without compromise

In the year 2000, Cristini Group took an important strategic decision: utilising its thirty year long experience with paper machine service, to develop its proprietary line of diagnostic instruments, in close cooperation with prestigious Universities and research centers of Excellence.
The target was to outperform the limits of the traditional tools used to service pulp and paper machines, using innovative principles and state-of-the-art electronic components. The results of this project are three product lines: PresScan™ moisture meter, FiberScan™ consistency meter, PermFlow™ water permeability meter. Developed by service Engineers, for service Engineers.

The FiberScanONE™ heavy-duty transportation case. Built to military standards.

Cristini Engineering