

Solutions for the pulp, paper and allied industries

**PROFILE/Plus** 

# Automated 75° Gloss

The Technidyne PROFILE/Plus Gloss automatically measures the gloss at 75° in the MD and CD according to the following Industry Standards: TAPPI Method T 480, ISO 8254-1. Related methods: ANSI P3.23, T 653

- + Two-sided Measurements
- + Complete Gloss Analysis
- + Fast and accurate results
- + Self-adjusting Backing
- + Pulsed Lamp Technology
- + Air Pressurized Optical Assembly
- + PROFILE/Plus Automated Testing System Ready





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PROFILE/Plus

#### **Features**

#### **Two-sided Measurements**

By performing top and bottom side measurements in the same unit, at the same time, efficiency is greatly increased. This advantage is multiplied when combined with simultaneous Machine Direction and Cross Machine Direction measurements.

#### **Totally Automated**

The built in automated paper feed enables effortless profiling of reel strips. The PROFILE/Plus Gloss is also equipped with sample backing vacuum to provide consistency in the testing routine. Profile test routines can be customized, saved and easily used for specific grades, machines or customers.

#### Easy to Use

Easily recognizable icons help navigate the PROFILE/Plus instrument, when operating individually. When operating as part of a larger system the software controls all the functions automatically.

#### **Complete Gloss Analysis**

The home screen displays details for both single readings and profile settings, including the four user selectable profiles set as default. Profile data for complete gloss analysis of the reel strip is also available through the system software.

#### **Easy Access to Data**

Profile data can be easily accessed for editing or other functions. Erroneous values caused by random flaws in the sample can be deleted from the profile statistics. All the profile data can be viewed numerically or graphically. Password levels protect the integrity of results.

#### Self-adjusting Backing

Correct sample placement is crucial to obtaining good results. The self adjusting backing ensures that the substrate (sample) is always properly positioned. This feature eliminates errors caused by erroneous readings made on paper that was not correctly placed in the measurement area.

#### **Pulsed Lamp Technology**

The pulsed lamp technology that is used in the PROFILE/Plus Gloss provides longer lamp life. This will ensure that the instrument continues to remain stable for a long time and will improve repeatability and reproducibility of the readings.

#### **Air Pressurized Optical Assembly**

One of the most critical elements in the measurement of any optical property is the cleanliness of the optics themselves. The PROFILE/Plus Gloss has an air pressurized optical assembly that maintains clean optics by reducing contaminants.





## **Economic Benefits – Lowering Costs and Saving Money**

**Two-sided measurements** make the testing more efficient and optimize manpower utilization, thus saving money.

**Conforms to industry standards** helps to eliminate the need for costly and time consuming correlations.

**Totally automated** operation means reduced testing time and less measurement variability. This will allow for tighter control specifications, improved quality and lower costs.

**Ease of use** ensures smooth operation, greater efficiency, and lower testing costs. **Complete gloss analysis** helps operators to find and correct problems and improve profitability.

**Easy Access to Data** increases the ability to make positive process changes in order to improve quality.

**Self-adjusting backing** ensures reliable results, which reduces the need for costly retests. **Pulsed Lamp Technology** improves the life of the lamps, thus saving money on service costs.

**Air pressurized optical assembly** helps to maintain clean optics to improve measurement quality and lower operating costs.

Many of today's paper market applications demand high gloss stock. As a result the need for the papermaker to accurately control the calendering and coating processes is of the utmost importance. Gloss measurement at 75° has been determined by both TAPPI and ISO to give one of the best correlations between instrumental measurement and visual observation.

# **PROFILE/Plus Automated Test System**

PROFILE/Plus is a unique building block approach to automated testing. Each PROFILE/Plus instrument is a standalone instrument that can be easily placed in line with other PROFILE/Plus instruments to operate as an automated test system. This one of a kind versatility allows you the flexibility to build an automated test system that can be established over time or all at once. In addition as your testing



needs change, the versatility of the PROFILE/Plus provides the flexibility to modify the testing sequence or move other test in to or out of the system. PROFILE/Plus puts you in charge of your automated testing program. In today's ever changing markets, having a testing program that can adapt, is key to long term viability.







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### **Specifications and Technical Data**

- ✤ CD or MD profile strips
- Single sheet samples (automatically)
  A3, A4, and 8<sup>1</sup>/<sub>2</sub>" x 11"
- + Handsheets
- Thickness Range 25 to 1000 μm
- Specular Angle 75°
- Receptor (solid) Angle 11.4°
- Illuminated Area –
  0.76 x 0.39 in.
  19.3 x 10.0 mm
- ◆ Specimen Aperture –
   1.37 x 1.00 in.
   34.9 x 25.4 mm
- ➡ Lamp Type LED
- Lamp Color Temperature 2850 ± 100K
  Effective Wavelength 572 nm
- 🕈 Weight
  - o 68 lb
  - o **31 kg**
- ➡ Dimensions
  - $\circ$  Height = 26" (66 cm)
  - Depth = 18'' (46 cm)
  - Width = 10 1/2" (26.7cm)
- Voltage/Frequency 0 100-130 VAC/49-61 Hz
  0 210-250 VAC/49-61 Hz
- Air 30 40 psi
  - o 205 275 Kpa





#### **Results:**

**Complete Gloss analysis** 

Measurement completed in seconds!

Top and Bottom side measurement

Conforms to industry standards

Multiple measurement, averaging, statistics and trending capabilities

Average, Maximum Test Value, Minimum Test Value and Standard Deviation

Tabular and Graphical display of results

