TXL-KMS-020 / 27 October 2026 · One-year manufacturer warranty

Fabric GSM Calculation Kit

GSM kit with circular cutter and precision balance.

Model technical data

1	Standard kit: 100 cm² circular sample cutter, digital balance, cutting pads and spare blades.
2	Other cutting areas are separate model options.

Physical specifications and utilities

Electrical supply	Approx. low-voltage adapter with 100–240 V AC, 50/60 Hz input; output voltage is build-dependent.
Power / connected load	Approx. 5–20 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 350 × 350 × 200 mm (W × D × H).
Instrument weight	Approx. 3–7 kg net.
Gross / shipping weight	Approx. 5.3–10.8 kg gross; estimated packing allowance.
Lab requirements	Level, stable working surface; specimen conditioning follows the selected method.

Dimension order and approximate values are stated in each row. Packaging data are separate from instrument dimensions and net mass. Approx. rows are preliminary engineering estimates based on comparable equipment and function/capacity; they are not verified manufacturing measurements or standard requirements. Installation and shipment are finalised against the approved drawing and nameplate. Estimate scope: base product / one unit; external computer, bench and auxiliary plant excluded.

Specifications, dimensions, and power requirements are approximate and subject to change without prior notice for continuous design improvements.

Product technical specifications and images may vary according to manufacturing conditions and applicable standards.

Test and configuration

Measured output / function	Specimen preparation for mass per unit area (g/m²)
Parameters selected for the method	Cutting area, balance resolution and sampling
Verification points	Cutting area and traceable balance check

Control and recording specification

Method-specific software and recording requirements follow. Delivered software modules are defined by the order scope.

• The need for integrated software depends on the method and selected hardware; manual instruments use an external test record.

• Method code and edition, specimen ID, operator and selected test parameters are linked to the record.

• Mass per unit area = specimen mass / area; for a 100 cm² specimen, g/m² = mass in grams × 100.

• Raw measurements, units, valid/invalid test flags and the reported result remain traceable.

• Calculations are checked against known inputs and an independent calculation; sensor channels are checked against calibration values.

Related test methods

ISO 3801 · ASTM D3776

Listed methods are application references. Suitability is established by assessing hardware, method edition and calibration together.

Test parameters for the reviewed method

The values below were reviewed in selected clauses of the stated source edition. They are not a declaration of equivalence to a later edition or independent instrument verification.

ISO 3801:1977 / 4.4-4.5

1	Small-specimen method: 10 × 10 cm template or 100 cm² circular cutter with 1% area accuracy; balance capable of weighing to 0.001 g. Method and specimen area are stored with the mass-per-area calculation.

ASTM D3776-96 / 1.2, 5.1–5.2

1	Distinguish full-piece, full-width, small-swatch and narrow-fabric options. Balance capacity/sensitivity must support weighing within ±0.1% of specimen mass. With a cutter, retain actual cut area, mass and calculated g/m².