



ProfiBlot™ T48 – Smart. Reliable. Easy-to-use.

Fast temperature controlled Blot Processor for Southern Blot & Western Blot assays

Full automation of Southern- and Western Blot processing for higher productivity and reproducibility

The ProfiBlot T48 is Tecan's smart and reliable Blot Processor, designed to take time-consuming routine work off your hands by automating Southern Blot & Western Blot assay running within the temperature specifications of the instrument. It offers full automation of reagent dispensing, hybridization and washing of strip based assays, used for a range of applications such as screening of infectious diseases, HLA-typing, HPV-testing etc.

Features & benefits

User safety

The ProfiBlot T48 is designed to minimize human exposure to potentially infectious samples. The entire assay is performed in an enclosed environment to prevent unauthorized interference.



Advanced heating & cooling system

- Peltier system for active heating & cooling of tray containing assay strips
- Additional top-heating element avoiding evaporation during hybridization
- Integrated reagent pre-heating & stirrer system for stringent wash steps



High reliability

Using latest technology the ProfiBlot T48 has been designed for high reliability and provides an impressive track record of quality via an installed base of several thousands of instruments.



Reagent saving function

Minimize running costs by reducing the amount of dead volume. The ProfiBlot T48 pumps back unused reagents from the feeding lines into the corresponding reagent bottles.



Separate collection of waste

The ProfiBlot T48 collects toxic - and biohazardous waste in two individual bottles which helps to minimize high waste treatment costs.



Fast washing

To achieve best results, high wash efficiency & high throughput for up to 48 samples per run the ProfiBlot T48 uses multiple dispense pumps and aspiration pumps in parallel for simultaneous washing of three assay strips at a time.



Combines top & bottom heating for advanced temperature control

Auto-pump calibration

The precise reagent delivery system of the ProfiBlot T48 provides consistent results without cross-contamination. An advanced calibration system performs a self-check for each individual pump. Subsequently, an auto-calibration system is available to recalibrate pumps eliminating tedious manual calibration procedures.



Ease-of-use

- On-board operation & easy programming via BlotWare™ software
- Start of predefined procedure at the push of a button
- Integrated display shows status of run
- Pre-defined cleaning protocols for easy maintenance
- Disposable trays to avoid tedious cleaning steps
- Black-color of tray minimizes reflections during offline tray scanning to document results



Regulatory compliance

Built to improve safety and reliability in the laboratory the ProfiBlot T48 and the disposable trays holding the assay strips have been designed to meet the IVD-directive 98/79/EC for Europe.



Do you always experiment with the right temperature?

For reliable temperature control the ProfiBlot T48 uses a Peltier system, which pre-warms water and circulates it underneath the tray, thus providing stable hybridization conditions. An additional top heating element above the tray provides good temperature uniformity and helps to avoid evaporation of reagents during incubation cycles.

For efficient stringent washing after hybridization, the ProfiBlot T48 is equipped with an integrated system for reagent pre-heating & mixing, and provides processing of three assay strips in parallel.

For fast cooling of the assay strips down to room temperature after the stringent wash cycles, the ProfiBlot T48 additionally circulates pre-cooled water underneath the tray.

Product highlights include:

- Advanced Peltier system for active heating & cooling of tray
- Additional top heating element to avoid evaporation during run
- Integrated reagent pre-heating and magnetic stirrer system
- Reagent saving feature to minimize dead volumes & running costs
- Automated processing of up to 48 samples per run
- Fast washing of 3 assay strips in parallel for high throughput
- On-board operation & BlotWare software for easy programming
- Auto-calibration of dispense volumes eliminates tedious manual procedure
- Pre-defined cleaning protocols for easy maintenance

Specifications ProfiBlot T48

General

Display unit:	Liquid Crystal Display with 2 rows of 16 digits
Keyboard:	4-key membrane keyboard
Number of dispensing channels:	6 (7 th channel optional)
Capacity of reagent bottles:	4 (optional 5) x 250 ml, 1 x 500 ml, 1 x 1000 ml
Capacity of waste bottles:	1 x 500 ml toxic waste, 1 x 2500 ml hazardous waste
Capacity of bottles for heating system:	1 x 2000 µl, 1 x 3000 µl
Computer interface:	USB, RS232
Incubation temperature:	adjustable between 35°C and 65°C
Temperature accuracy:	± 1°C
Volume of reagent dispensed:	250 – 3000 µl in 250 µl steps
Dispensing accuracy:	2000 µl: less than or equal to 10% 250 µl: +25% to -20%
Cooling:	Temperature < 30°C within 6 min

Power

Supply:	Auto-sensing for the settings 100 – 120 Volt and 220 – 240 Volt 50 or 60 Hz
Main fuses:	2 x T 8A / 250V (Slow Blow)
Consumption:	Max. 900 VA

Physical

Width closed/ opened:	804 mm / 804 mm
Height closed/ opened:	460 mm / 671.4 mm
Depth closed/ opened:	459 mm / 510.6 mm
Weight:	47 kg

Tecan – Who we are

Tecan is a leading global provider of laboratory instruments and solutions in biopharmaceuticals, forensics, clinical diagnostics, academic centers and life science industries, and specializes in the development and production of automation solutions, detection instruments such as microplate readers, microarray-related products and washers.

Founded in Switzerland in 1980, Tecan has manufacturing, research and development sites in both North America and Europe, and maintains a sales and service network in 52 countries. To date, Tecan has distributed approximately 20,000 microplate readers worldwide and is committed to continuous technological improvements and compliance to global quality standards.

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