

Computerized Type TL Badge Automatic Reader with Built-In Auto-changer

The UD-7900 Reader automatically reads all “UD-800 Series” TL Badges with high reproducibility and precision. Using the non-contact optical heating method, the reader can measure a large number of TL badges at high speed with reliability.

Both the photon-counting method (pulse-counting) for small signals and the current integration method for large signals are employed to precisely detect the thermoluminescence throughout a wide range from low to high doses.

The reader is equipped with self-checking functions for the optical path; sensitivity of PM tube, heating stability etc. It also performs automatic functions such as annealing of the TL badges for repeat use, optical reading of the ID code, and sensitivity adjustment correction by the built-in reference light source.

Pre-heating, annealing, and ID code optical reading are also incorporated.



FEATURES

UD-7900

- **Optical Heating System**, (Non-Contact)
Extremely fast non contact heating requiring no gas or annealing ovens. The heat is localized for high operational reliability.
- **Simplified Operation** One-press automatic start. Minimal training for operators and technicians. Very easy to service and maintain.
- **Batch Measurement With the Built In Auto-changer** batch measurement of 500 badges is possible . This saves time as there is no need to manually feed badges into reader
- **Selectable Heating Mode** Digital heating control of power and time. UD-710A and UD-716A heating emulation. No need to change hardware, connections, or lamp.
- **Built in Glow Curve Interface.**
- **Built in Electronic Real Time Measurement of Heating Temperature Profile.**
- **Power Supply** (factory preset)
100/115/220/230/240V AC/50-60Hz
- **Windows based Control Software** ; PC and Monitor are included
- **Communications** to Host PC or Mainframe is easy through built in RS232 Interface
- **Uses field proven and reliable UD-710/UD-730 mechanics**

SPECS

UD-7900

Applicable TL Badge	UD-800 series (All Panasonic TLD Badges)
Heating Method	Optical Heating System (Non Contact)
Measuring Range	Li ₂ B ₄ O ₇ 10mR ~ 1000R (100μSv ~ 10 Sv) CaSO ₄ 1mR ~ 50R (10μSv ~ 500mSv)
Measuring Time	Fast Mode (UD-710) - Approx. 20 sec. for 4-element badge Slow Mode (UD-716) - Approx. 35 sec. for 4-element badge
TL Badge Loading	Automatic loading with Built In Auto-changer for 10 magazines 50 badges per magazine x10 magazines = 500 badges/loading
Weight and Dimensions	Approx. 150kg Approx. 1000(W) x 850(H) x 430(D) mm

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