

## Model 7200 Automatic TLD Reader

Model 7200 automatic TLD reader has been already designed and manufactured in Iran to read HARSHAW 6600 TLD cards. The reader consists of several main parts including heating element, photomultiplier tube, glow curve display, internal computer and other electrical boards. The photomultiplier tubes can simultaneously measure double TLD tablets in a personal card. Time temperature profiles can be separately determined by a user for each TLD chip via a comprehensive software program. In addition, the reader is equipped with a built in a computer notebook, thus using any peripheral hardware device recording the TLD readouts would not be necessary. This equipment warms up the TLD tables of TLD cards with a pre-defined temperature profile resulting visible rays from their surface and then radiation can be shown indirectly by measurement of visible light. This equipment is designed to read 100 cards during each loading procedure and to save the information in the internal disk drive and/ or to print the results. The system software can be executed with Microsoft Windows versions XP, 7 and 8. This software has several pages to control warm up and reading procedures required for reading of Harshaw quad tablet TLD cards.

This equipment has two cartridges (loading and unloading) and can read 100 TLD cards during each session. Data related to each card can be saved in the PC according to its bar session and bar code. Electronic boards carry out processing of the data produced by dose meter section of the equipment. So, the system can operate with a high speed rate and no need to operator during process.

### TLD Reader Specification

#### Proprietary Indicators

- Read the barcode ID on the card
- Ability to receive quad tablet 100 cards, during each loading simultaneously.
- High security of the system
- Reading two tablets on the card, simultaneously
- No need for a separate PC
- Anti IR filter to absorb IR read frequencies

- Designed on the basis of the Harshaw TLD model 6600
- The maximum temperature applied to the TLD is 300 °C.
- Quality control tests are automatically applied to the system.
- Industrial computer with flat and touch screen
- The heat applied to the TLD through the flow of nitrogen or air gas

### IAP-TLD User Software

- Set and save 10 thermal profiles
- including a glow curve and a heat profile
- Register the date and time in each reading
- Possibility selecting up to 4 ROI
- compliance with ISO standards
- Install the software in Windows 8.7.XP

### Applications

- Inspection of radiation on the skin surface
- Dose check of critical organs
- Diagnostic dose study
- Environmental dosimetry
- Radioactive material study
- Dose check of electronic components
- Total body irradiation dose verification
- CT dose measuring for quality assurance of CT
- Measurement factor for stereotactic scattered beam
- Food irradiation testing
- Radiotherapy treatment verification