Harshaw 8800 PLUS Specifications

- **Range:** Seven decades
- **Warm-up Time:** 20 minutes
- **Photometrics Uniformity:** Less than 1% deviation
- **Stability:** Better than 1.0 μGy, based on one standard deviation of ten consecutive measurements
- **Repeatibility:** Less than 2% variation (based on 1 standard deviation of 10 sequential measurements at 1 mGy (100 mrad)
- **Readout Time:**
  - TLD cards: 140 per hour
  - EXT-RAD Chipstrates: 280 per hour
  - DXT-RAD Ringlets: 560 per hour
- **Card Identification:**
  - Codabar
  - Interlaced 2 of 5
  - Code 39
  - Code 128 alphanumeric
- **Electrical:**
  - 110 or 120 VAC ±10%, 60 Hz. 6 amp, 220 or 240 VAC ±10%, 50Hz. 3 amp
- **Operating Temp Range:** 15˚ C to 40˚ C
- **Storage Temp Range:** -10˚ C to 60˚ C
- **Shock Resistance:** Will withstand a 1 cm drop onto a concrete surface
- **Humidity Tolerance:** -10˚ C to 60˚ C, and RH up to 90% (not condensing)
- **Light Exposure:** Tested to withstand a minimum of 1,000 W/m²
- **Weight:** 180 kg (400 pound)
- **Height x Width x Depth:** 105 cm (41.25 in.), 78 cm (30.5 in.), 68 cm (25.5 in.)

Harshaw 8800 PLUS Ordering Information

- **Accessories and Options:**
  - Built-in Internal 90Sr/Y Irradiator (0.5 mCi/18.5 MBq)
  - Model 8810 high capacity TLD card irradiator
  - Built-in triple barcode scanner for use with EXT-RAD extremity dosimeters
  - Built-in camera barcode scanner for use with DXT-RAD extremity dosimeters
  - Model 8800 Plus Basic and Enhanced Spare Parts Kit
  - Model 8800 Plus Neutral Density Filter Lens Drawer Assembly (10:1, 100:1, 1000:1)
  - Load & Unload Card Cartridge for Model 8800 Plus
  - Nitrogen Gas Flow Meter/Regulator
  - Nitrogen Generator with Integrated Compressor
  - WinREMS-SQL Version
  - 8800 Plus Card Sorting Option

Thermo Scientific™ RADSafe™ Certified Services

Configurable services tailored to your specific needs

Select from a wide variety of service products to maximize the productivity of your assets while managing the high cost of unplanned maintenance and repair:

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Configure your extended warranty, preventative maintenance, calibration and commissioning and start up services plan and enjoy peace of mind.

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Spare Parts

Looking for spare parts for this instrument? Visit our spare parts website at www.analyticalinstrumentparts.com

Thermo Scientific Harshaw 8800 PLUS TLD Reader

What Readers aspire to be

This product is available through:

**JRT Associates**

5 Nepehanus Avenue, Suite 2B
Elmsford NY 10523

800-221-0111
The Thermo Scientific™ Harshaw™ 8800 Plus TLD Reader is the ideal solution for dosimetry services and independent dosimetry labs that require maximum processing efficiency. Delivering the highest capacity and the fastest reading capability, the versatile Harshaw 8800 Plus can process whole body, environmental and extremity dosimeters for gamma, beta and neutron dose measurements, enabling the flexibility necessary to increase productivity and decrease operating costs.

Equipped with four heating/data acquisition channels and a set of four cooled photo multiplier tubes, the Harshaw 8800 Plus can simultaneously process four TL elements per processing run, minimizing manual interaction and enabling overnight processing runs which can increase total throughput of the dosimetry lab. With an optional internal irradiator, the Harshaw 8800 PLUS can perform automated calibrations, reducing set up time and further improving process efficiency.

Peace of Mind
- Built in ISO 9001 certified factories for over 40 years
- Used worldwide in IEC, NVLAP, DOELAP, ANSI accredited facilities
- Cards guaranteed up to 500 reads
- Low maintenance requirements
- Long term factory support extends operational life and reduces total cost of ownership

Improved Read Quality
- Linear range from 1µGy to 20 Gy, with neutron monitoring capability.
- Lithium Fluoride based materials are near tissue equivalent and not sensitive to light.
- Variety of tamper-resistant holders, designed with optimized filtration for energy discrimination are available with attachment to lapel and/or belt.
- Uniquely bar coded for chain of custody, and available in different colors as an aid to recognition and categorization of issuance or wear periods.

Applications
Multi-element card dosimeters or individually bar-coded extremity dosimeters are best suited for:
- Whole body dose monitoring
- Extremity dose monitoring
- Fast and Thermal Neutron dose monitoring

Multi-Element Card Dosimeters for whole body and environmental monitoring
- Harshaw TLD materials have a linear useful range from 1µGy to 20 Gy, with neutron monitoring capability. Lithium Fluoride based materials are near tissue equivalent and not sensitive to light.
- Teflon encapsulated TL material is mounted in an aluminum card for extended durability.
- Variety of tamper-resistant holders, designed with optimized filtration for energy discrimination are available with attachment to lapel and/or belt.
- Uniquely bar coded for chain of custody, and available in different colors as an aid to recognition and categorization of issuance or wear periods.

Extremity Monitoring
- Sealed disposable finger rings, finger cots, wrist bands
- Sterilizable dosimeters for maintaining hygienic conditions
- Carrier cards for reading multiple extremity dosimeters
- Optional built-in extremity barcode readers (EXT or DXT) to automatically associate the TL response from the individually-barcoded extremity dosimeters

Optional $^{90}$Sr/$^{Y}$ Internal Irradiator - Total control of system calibration
- Provides you complete control over your dosimetry system allowing you to save time and money by not relying on a manufacturer for calibration dosimeters.

Multi-Element Card Dosimeters for whole body and environmental monitoring
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Improved Read Quality
- Unique glow curve and temperature heating profile provided by Harshaw TLD readers provides verification of read quality. The glow curve is independent of potential inaccuracies induced by environmental conditions in reading, storage and handling.
- In case of errors in reading or a faulty/damaged dosimeter, glow curve analysis could help determine validity of the reading and drive appropriate corrective or preventative actions.