

# SGR-740 Spectral Gamma Ray Core Logger

**Brand:** OFI Testing Equipment, Inc.  
**Product Code:** 700-410  
**Availability:** Call for availability



## Description

A total gamma-ray well log is a recording of the total natural gamma radiation of the formation around the wellbore. A spectral gamma-ray well log is a recording of the relative amounts of the three main elements that create the natural radiation (Potassium, Uranium, and Thorium).

The SGR-740 Gamma Ray Core Logger measures the energy level and quantity of the radiation emitted from a core sample and calculates the quantity of each of the elements. The amounts of each of these elements and the total gamma-ray count are then plotted as a function of depth.

## Features

- Dual logging mode - simultaneously plots Spectral and Total logs from cores in one pass
- Constant temperature controller is integrated with scintillation detector - improves repeatability
- Stepper motor drive mechanism for multiple speed settings - optimizes resolution and speed
- Automatic conveyor stop mode - prevents cores from falling off end of conveyor
- Mounted on locking swivel castors - enables quick and easy moving
- V-shaped conveyor track - keeps cores in center of conveyor
- Can log cores up to 6" in diameter
- Calibration standards are available on request

## Method of Operation

To begin a test, the operator arranges the core samples onto the conveyor belt in order of depth. The unit will record background radiation for 15 minutes in order to establish a base reading. Then the conveyor belt pulls the samples through the machine while the computer shows the results on the screen. At the end of the test, the results are graphed and can be printed or exported. The SGR-740 plots both spectral and total gamma radiation.

## Specifications

- Belt Size: 6" wide x 9' long (15 x 274 cm)
- Gamma Ray Detector: NaI Crystal, 3" x 3" (8 x 8 cm)
- Gamma Measurement
  - Potassium:  $\pm 0.3\%$
  - Thorium:  $\pm 6$  ppm
  - Uranium:  $\pm 6$  ppm
- There are four different types of scan. Each type will have different belt speed and data reporting:
  - Total Gamma
    - Speed: 1 ft/min
    - Data: Depth / Total Gamma
  - API Gamma
    - Speed: 1 ft/min
    - Data: Depth / API Gamma / Potassium (%) / Uranium (ppm) / Thorium (ppm)
  - Spectral Gamma
    - Speed: 0.2 ft/min
    - Data: Depth / Total Gamma / Potassium (%) / Uranium (ppm) / Thorium (ppm)
  - Custom
    - Speed: 0.01 ft/min to 2 ft/min
    - Data: Depth / Total Gamma / Potassium (%) / Uranium (ppm) / Thorium (ppm)
- Size: 24" x 47" x 118" (60 x 120 x 300 cm)
- Weight: 992 lb (450 kg)

## Requirements

- Power: 230 Volts, 50/60 Hz, 2 Amps

## **Software Features**

- Comes complete with a PC and software for Logger Control and Data Acquisition

## **Part Number**

- #700-410

## **Product Gallery**