

Precision
Calibration



Precision Calibration Center

We Calibrate Precisely!

P.O. Box: 41028
Address : (Street 10) Zone 57, Street 516, Building No. 14
Industrial Area, Doha, Qatar
P: + 974 4451 4407
E: technical@precision-qa.com

Our commitment to
quality makes a difference
you can measure

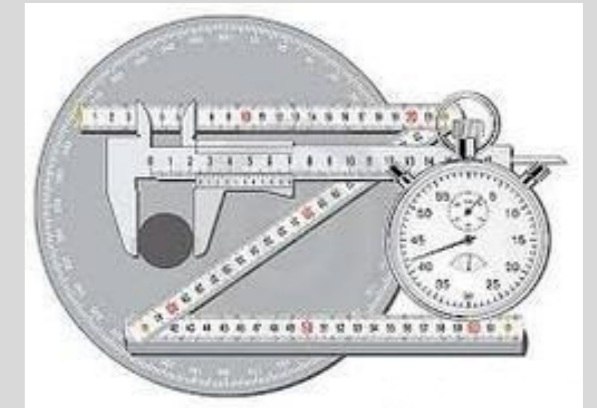


Calibration Lab

Precision Calibration Center, an A2LA accredited and an ISO 17025 certified laboratory, is a well-equipped, electrical and mechanical instrument and equipment calibration center. Precision Calibration Center, is approved by Asghal the Qatari Public Works Authority.

Precision Calibration Center guarantees the efficiency of your instrument and test equipment and provides, full-service lab and on-site services. For accurate and reliable results, we have invested significantly in hi-tech and modern equipment that conform to international standards.

The lab's calibration services conform to the highest regulatory and audit requirements of various industries, like Utilities, Oil & Gas, Food & Beverage Industry, Aerospace and Transportation, Heavy Industries, Manufacturing Industries, Petrochemicals, etc... Our Calibration services are technically evaluated and approved by Utilities and major clients.



Our **Competitive Edge**



- Our laboratories are environmentally controlled, ensuring the correct atmosphere for the precise measurements.
- Calibrate a wide range of electrical or mechanical instrument and equipment in our centralized facility
- Our services are in full compliance with the ISO IEC 17025 Standards
- Every measuring instrument calibrated/recalibrated by Precision Calibration Center receives a certificate listing the calibration result and uncertainties. Further, the records are maintained for at least 5 years enabling us to send you periodical reminders
- Our trained technicians can: Calibrate instruments ranging from the simplest meter to the most complex multifunction calibrator. If defective it can be sent to the centralized workshop for repair

Accreditation & Approvals



SPC DOZA

Laboratory Calibration Services



Our focus and commitment to excellence have made us one of the leading calibration and repair solutions provider in the region.

We attribute our success to the modern techniques, value for money and the quality driven service!

In addition, our high-quality calibration laboratory services include documentation to satisfy your industry and regulatory or audit requirements.

Our well-equipped lab implements the use of various parameters to ensure that the instrument sent to us for calibration and repair are thoroughly checked and rectified so that you can be assured of an optimum accuracy on the machines that we have calibrated at our lab.

Wide Range investment in manpower to guarantee resource availability for on-site work & loop check.



Nuclear Gauge

Calibration Range:

- Density (1758.8 to 2725) kg/m³
- Moisture (0 to 800) kg/m³

Calibration Method Used:

In accordance with ASTM D7759

Some Equipment /
Instrument
Calibrated

In Lab

- Humboldt
- Troxler
- Instrotek & CPN



Temperature

Calibration Range:

- -100°C Up to 650°C.
- Infrared thermometer up to 650°C.
- Humidity.

Calibration Method Used:

ITS-90

Some Equipment /
Instrument
Calibrated

In Lab

- Ovens
- Thermographic Cameras
- IR Temperature equipment

On Site

- Ovens
- Thermographic Cameras
- IR Temperature equipment



Pressure

Calibration Range:

- -1 bar Up to 1000 bar Hydraulic;
- -1 bar up to 200 bar pneumatic.

Calibration Method Used:

BS EN 837-1:1998

Some Equipment /
Instrument
Calibrated

In Lab

- Dead Weight Testers
- Pressure Gauges
- Calibrators

On Site

- Dead Weight Testers
- Pressure Gauges
- Calibrators



Force

Calibration Range:
• Up to 3000 KN

Calibration Method Used:
ASTM E-74

Some Equipment /
Instrument
Calibrated

In Lab

- Load cells

On Site

- Universal Compression machines
- Load Rings
- CBR/Marshall Machines



Mass

Calibration Range:
• 1 mg up to 1000 kg.

Calibration Method Used:
OIML R111-1 2004 (E)

Some Equipment /
Instrument
Calibrated

In Lab

- Standard weights
- Weighing balances

On Site

- Forklifts
- Platform Weighing Scales
- Cranes
- Heavy Chains



Dimension

Calibration Range:
• Up to 1000 mm.

Calibration Method Used:
DIN 862, 863

Some Equipment /
Instrument
Calibrated

In Lab

- Micrometers & Vernier calipers
- Depth & height gages

On Site

- Micrometers & Vernier calipers
- Depth & height gages



Rotational Speed

Calibration Range:
• up to 9999 rpm

Some Equipment /
Instrument
Calibrated

On Site

- Centrifuges
- Mixers
- Motors



Sound

Calibration Range:
• 94 dB & 114 dB.

Some Equipment /
Instrument
Calibrated

In Lab

- Sound Level Meters



Nuclear Density Gauge

Nuclear Density Gauge is a tool used in civil construction and the petroleum industry, as well as for mining and archaeology purposes. It consists of a radiation source that emits a cloud of particles and a sensor that counts the received particles that are either reflected by the test material or pass through it.



Nuclear Gauge Transit Case

Sturdy and protective travel case for different Nuclear gauges



Nuclear Gauge Tool Set

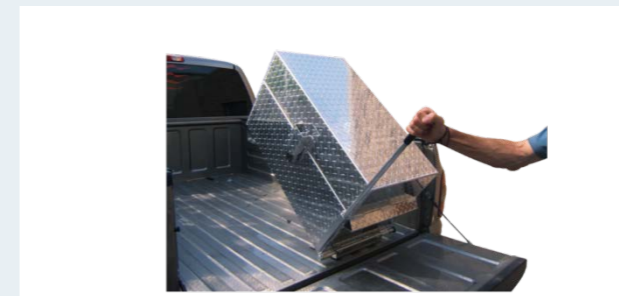
Tool kit includes: rod guide/scraper plate, drill pin, four-pound hammer, pin extraction tool and zippered accessory case.

Laboratory Equipment and Services



TLD badges

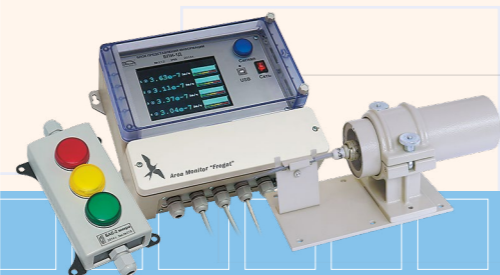
A thermo luminescent dosimeter, or TLD, is a type of radiation dosimeter. A TLD measures ionizing radiation exposure by measuring the intensity of visible light emitted by a crystal inside the detector when the crystal is heated. The intensity of light emitted is dependent upon the radiation exposure.



Nuclear Gauge Containment System

The safety containment box is an enhanced field security system for nuclear gauges. Constructed of heavy-duty steel plate.

AREA MONITOR "FREGAT"



Area Monitor "Fregat" is designed for creating relatively simple and inexpensive radiation monitoring systems at such facilities as radionuclide sources storage areas, isotope products warehouses, nuclear medicine departments, PET centers, calibration laboratories where sources of ionizing radiation are used, etc.

Small scale automated radiation monitoring systems built with "Fregat" components, featuring audible and visual alarms, are ideally suitable to meet the regulatory radiation safety requirements.

Area monitor "Fregat" requires virtually no adjustment; it is simple and convenient for installation and operation.



Ethernet / RS-485



Service workstation



BZS-2 "Micro": external audible alarm



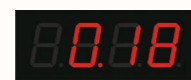
BAS-2 "Micro": external visual alarm



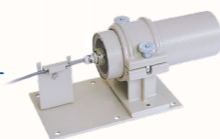
Illuminated warning signs



BPI-1D Local display unit



"Impuls" external display unit



DBG-S11D: wide range gamma area monitor



UDKS-100: gamma and X-ray area monitor



UDMN-100: neutron area monitor

UIM-D RADIATION AREA / CONTAMINATION MONITOR



UIM-D area monitor provides solutions for different radiation protection problems depending of the chosen detector units.

Features

- Individual threshold setting for each measurement channel
- Continuous area and process monitoring
- Collects & displays data from two measurement channels (units with RS-485 or analog pulses)
- Audible and visual alarms on exceeding preset thresholds or status of connected devices
- Individual threshold setting for each measurement channel

Activation of the external alarm or executive devices when any threshold is exceeded

The wide panel displays the following information:

- Values of measured parameters as $\text{min}^{-1}\cdot\text{cm}^{-2}$, $\text{s}^{-1}\cdot\text{cm}^{-2}$, $\mu\text{Sv/h}$
- Diagnostic information about the status of connected devices
- Current date and time
- Position of measured values relative to the thresholds in the form of scales with green, yellow and red zones
- Time history (trend) for each measured value

UIM-3D DISPLAY UNIT



- Collects & displays data from two measurement channels, generates audible and visual alarms
- Displays data in CPM or in units per user's choice ($\mu\text{Sv/h}$, $\text{min}^{-1}\cdot\text{cm}^{-2}$, etc.)
- Wireless connection to PC
- Can be mounted on a wall or on a table
- Shows measurement trends

Physical characteristics

Measurement range

- Count rate: up to 150 000 CPM

Operating temperature range

- $-20 \div +50$ °C

Electrical characteristics

- Power supply: 220 V , 50 Hz

Mechanical characteristics

- Protection index: IP65
- Overall dimensions, weight: 221×172×85 mm, 3.9 kg

DKS-96

DOSIMETER / RADIOMETER

Popular dosimeter / radiometer distinguished by its reliability and a wide choice of detectors suitable for all main applications of dosimetry and radiometry.

- Continuous and pulsed gamma and X-ray dose H*(10) and dose-rate measurement
- Alpha, beta and gamma contamination survey
- Neutron dose H*(10) and dose-rate measurement
- Gamma radiation flux density in boreholes and liquid media measurement
- Search and localization of radioactive sources and contaminations
- Radiation survey of territories with fixing of geographical coordinates using GPS sensor

Features

- Automatic determination of detector type and selection of corresponding measurement modes;
- Indication of dynamic scale and signaling information about the instrument's status and all measured quantities (excess of thresholds, presence of external interference, battery status, etc.)
- A lot of alarm threshold settings – for dose and dose-rate (lower, upper warning and upper thresholds), for alpha and beta contaminations
- Fast monitoring mode using three preset thresholds;
- Convenient keyboard with direct access buttons for display illumination and thresholds control
- "Search" and "detection" modes of operation allow to perform surveys in a more effective way
- USB interface for communication with PC
- Nonvolatile memory for 2000 measurement results

Set of delivery

- Control unit UIK-05/UIK-05-01/UIK-06
- Probes (at the customer's choice)
- Plastic case
- Datasheet and User manual



UIK-05 control unit



UIK-06 control unit



Case

EXTERNAL PROBES ALPHA

ALPHA: BDZA-96

Standard probe for alpha radiation measurements

Detector:

- ZnS(Ag) 70 cm²

Measurement range (for Pu-239):

- 0.1 ÷ 10⁴ min⁻¹·cm⁻²

Overall dimensions, weight:

- Ø 130x240 mm, 0.9 kg



BDZA-96

ALPHA: BDZA-96B

Large area probe for alpha radiation measurements.

Recommended for contamination monitoring of hands

Detector:

- ZnS(Ag) 300 cm²

Measurement range (for Pu-239):

- 0.1 ÷ 2·10³ min⁻¹·cm⁻²

Overall dimensions, weight:

- Ø 230x290 mm, 4.0 kg



BDZA-96b

ALPHA: BDZA-96M

Small area probe for alpha radiation measurements

Detector:

- ZnS(Ag) 10 cm²

Measurement range (for Pu-239):

- 0,1 ÷ 10⁵ min⁻¹·cm⁻²

Overall dimensions, weight:

- Ø 65x240 mm, 0.9 kg



BDZA-96m

ALPHA: BDZA-96S

Medium area probe for alpha radiation measurements.

Detector:

- ZnS(Ag) 30 cm²

Measurement range (for Pu-239):

- 0.1 ÷ 5·10⁴ min⁻¹·cm⁻²

Overall dimensions, weight:

- Ø 90x240 mm, 1.0 kg



BDZA-96s