

Construction material Multidisciplinary Gamma-Ray Analyzer

GT-40 Cube



>RCI[®]
RADIATION CONTROL INSTRUMENTS

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The GT-40 Cube represents an advance in effective gamma-ray spectrometers, offering features for construction material testing and documentation. The compact laboratory machine quickly does tests and the cloud services publish reports during a short time.

It is used of accredited Laboratories today for testing of all construction materials against the new EU regulation No 305/2011.

The high sensitivity detector combined with sophisticated software connected to cloud service provides accurate and reliable results at real time. It is very suitable for self-check or accredited control.

The GT-40 Cube system utilizes advanced 1024 channel linear energy DSP spectrometer and pile-up rejecter with build in continuous analysis. It also uses an advanced method of automatic stabilization based on the presence of natural radionuclides; there is no need for an additional radioactive check source. The GT-40 Cube has user friendly navigation joystick and sun readable color display. Brightness is automatically controlled according external lighting. The GT-40 Cube compute concentration of K, U and Th. Different calibration modes can be switched so all kinds of construction materials can be tested. Assay can be extended for also other contaminants.

GT-40 Cube cloud services handle specific or simplified measurement to be present in final documentation. All measurements archives for up to 5 years both for laboratories and clients account.

Client connections show all measurements from latest to oldest. For producer with longtime control-system there are analyses of standard deviation.

Specifications

Subject to change without notice

GT-40Cube

BGO, volume 104 cm³, dia. 51 x 51 mm (2" x 2"), with bi-alkali PMT, shielded with 15 mm of lead in steel mantle
Lead chamber, minimum thickness 50mm lead and 20mm steel.

Spectrometer

1024 channel, 40 MHz DSP, Linear Energy corrected
Pile-up Rejector, 200 ns Resolution

Display

Colour, Trans reflective, 320 x 240 dots, 72 x 54 mm (3.5"),
Sun readable

Control

Cloud connection for pre-information and results

Acoustic

Speaker, dia. 28 mm and Built-in Microphone
Data Storage in time even if internet is out of order.

Communication

- Cloud connection with industrial Gateway
- Wi-Fi 802.11n
- Remote Control

Power

Rechargeable Li-ion 7.2 V / 6600 mAh and External AC
adapter. Minimum operational time 8 hours on battery at
20°C.

Size

Instrument dia. 120 mm x 415 mm
Shielding dia. 400 mm x 450 mm

Weight

GT-40S: 9 kg (19.8 lb)
Lead chamber: 279 kg (747.5 lb)

Cloud

Connections from Telephone, Tablet or Computer
Secure storage according GDPR (General Data Protection
Regulation)
Internet security with SSL-certificate including 256
encryption

Environmental

Operation Temperature Range -10 to 50 C
Protection IP-65, Dust and Water resistant
RFI/EMF Shielding complies with FCC (47 CFR part 15)
for Class A CE Certification

Application Measurement

- U, Th and K (+137Cs) Assay
- Test cube 150 * 150 mm
- All Construction material

Radiation Control Instruments

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