

Calibration Certificate for- GM 42



Customer: Shanghai Flying Trading Company

Serial No: 4214-113

Specification:

Measuring range: .50 μ Sv/h \div 10000 μ Sv/h

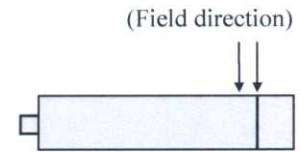
Energy range: 50 Kev \div 1.3 Mev

Sensitivity: 1.7 cps/ μ Sv/ h

Conditions:

Test source: Cs 137 (190mCi)

Results: Max. Allowed Error \pm 10 %



Calculated Field [μ Sv/h]	Reading [μ Sv/h]	Error [%]	Comments
70	67	-4.29	linearity
258	242	-6.20	linearity
610	591	-3.11	linearity
1294	ok	-----	calibration point
2796	2740	-2.00	linearity
4920	4850	-1.42	linearity
7200	6910	-4.03	linearity
>10000	OFLO	-----	Overload S
>20000	OFLO	-----	Overload H

Notes:

1. Error [%] = {(reading) - (calculated field) / (calculated field)} \times 100
2. Recommended calibration frequency: Once a year.

Calibrated by: MOTTI

Date: February 19, 2015 Due: February 19, 2016

Operation checked by: TEDGI

Date: January 15, 2015 Approved by: TEDGI



The actual exposure rate was measured by calibration of the SSDL reference ionization chambers at Physikalisch-Technische Bundesanstalt PSDL (6.62 30/04K) and in compliance with the US NCRP 112 requirements



QUALITY CONTROL – FINAL INSPECTION 

CUSTOMER: Shanghai Flying Trading Company

INSTRUMENT: GM – 42

SERIAL No: 4214-113

MODEL No: BAK-1210

Functional and Electrical test: \checkmark
 Calibration Certificate: \checkmark
 Measurement Unit: $\mu\text{Sv/h}$

ENVIRONMENTAL TESTS

- 1. Temperature : \checkmark
- 2. Vibration : \checkmark

CHECKED BY: ASAF

DATE: February 19, 2015

Q.A TESTS

Test Source	Distance	Expected value		Result	
		15% mR/h	$\mu\text{Sv/h}$	mR/h	$\mu\text{Sv/h}$
Cs 137 – 20 μCi Rs111	in contact	7	70		72
Background check		< 0.03	< 0.3		0.1

Visual check: \checkmark
 Operation check: \checkmark
 150 m' Cable check: \checkmark

CHECKED BY: ASAF

DATE: February 19, 2015

DWG. No:	P.C. No:	DATE:	Det. Bd
10729-2	1541	12.03.08	0314-113

ORDER: FL15M012

ORDER Ack: 15090045

APPROVED BY: TEDGI

DATE: February 19, 2015



The actual exposure rate was measured by calibration of the SSDL reference ionization chambers at Physikalisch-Technische Bundesanstalt PSDL (6.62 30/04K) and in compliance with the US NCRP 112 requirements

CERTIFICATE OF WARRANTY

MODEL NO.: BAK-1210

INSTRUMENT: GM-42

SERIAL NO.: 4214-113

MANUFACTURED BY ROTEM INDUSTRIES LTD. (HEREINAFTER "the instrument")

SOLD TO: Shanghai Flying Trading Company (HEREINAFTER "the warranty holder")

We, the undersigned, ROTEM INDUSTRIES LTD., warrants that all products manufactured and supplied by ROTEM shall be free from defects in design, materials and workmanship and shall comply with ROTEM's technical specification when installed, in service and operated within the specifications for which they were designed. ROTEM will replace or repair any equipment or parts returned to it provided that investigation and factory inspection discloses that such defect developed under normal and proper use by the original user. ROTEM's liability under this warranty is limited to such replacement and repairs and shall not be held liable in any form of action for incidental or consequential damages to property or person.

The foregoing is in lieu of all other warranties, express or implied, including the warranties of merchantability and fitness for particular purpose.

1. Obligations under this warranty shall be limited to repairing or replacing of any instrument returned to our facility within 12 months of delivery to the original purchaser, provided prior authorization for such return has been given by an authorized representative of ROTEM.
The warranty period for G.M. Pancake Tubes, Scintillators and Photomultipliers is three months only.
2. The warranty is for repairs required for normal working conditions of the instrument as determined by ROTEM Industries Ltd., during the warranty period at no charge. This period of warranty also includes provision of all necessary spare parts at no charge for repair of the instrument.
3. This warranty will not be valid in the following cases:
 - 3.1 The breakdown or defect was caused by using the instrument not according to Manufacturer's instructions, or by unreasonable use, or breakage as a result of a Blow or fall to the instrument.
 - 3.2 The breakdown is caused by breakdowns or disturbances in the electricity network.
 - 3.3 The instrument was opened, fixed or tampered with, or changes were made to the Instrument by a person who did not receive ROTEM's authority to do so.
 - 3.4 The breakdown was caused intentionally or negligently.
 - 3.5 The breakdown is a result of external factors, such as fire, breakage or force majeure.
4. This warranty does not include the expendable components such as batteries and/or other energy sources, radiation emitting substances and such like.

ROTEM Industries Ltd.

Date: February 19, 2015



The actual exposure rate was measured by calibration of the SSDL reference ionization chambers at Physikalisch-Technische Bundesanstalt PSDL (6.62 30/04K) and in compliance with the US NCRP 112 requirements