GQ Electronics

GQ GMC-600/GMC-600+ Geiger Counter

GQ Electronics LLC

Revision 1.2

Overview

The.GQ GMC-600 series digital Geiger Muller Counter is designed to be a portable and convenient device. It can be used as industrial, commercial maintenance, research, evaluation, simulation and other analytical or scientific applications in areas such as industrial plants, public utilities, universities, laboratories, and electronic repair shops. The device comes with built in audible and visual signals for the level of radiation detected. It can be used for radiation detection and monitoring both indoor and outdoor, as well as in other similar environments. It features automatic data recording. It can continually monitor the radiation and log the data each second into internal memory. When connected to a PC, software can download the radiation history data to the computer and the user is able to analyze those data later. The GQ GMC-600/GMC-600+ installed a high contrast black/white LCD module, one front LED indicator and one analog data port. The analog   data port can be connected to any third party device application as data input.

The GMC-600/GMC-600+ installed a WiFi module, user is able to log the data via WiFi wirelessly.

The device is equipped with an USB port, utilized for communication and external power supply/charging of the internal rechargeable Li-Ion 3.6V/3.7V battery.

The GMC-600/GMC-600+ internal rechargeable battery can be charged with the a standard USB port, USB charger or with a computer USB port. Using the external power, continuous data monitoring is possible. Using either power adapter you will not have to worry about the batteries charge condition or any data loss.

The main board also has a real time clock on board for time related data logging purposes.

The GMC-600/GMC-600+ installed a high sensitivity sensors to ensure full scale/range measurement and higher accuracy. .

Specifications:

Range of dose rate indications, µSv/h   0.00 to ~4250
Range of exposure dose rate indications, mRem/h   0.00 to ~425
Reproducibility of indication   10%
Range of CPM   >1,000,000 (continuously)
Alarm levels by CPM   > 0 (continuously)
Alarm levels by µSv/h   0.00 to 4250
Alarm levels by mRm/h   0.00 to 425
Date indication   YYYY-MM-DD (continuously)
Time indication   HH-MM-SS (continuously)
Elapsed time indication   99 years(maximum)
Timed Count   1 Second to 256 days(programmable)
Scheduled Timed Count   0 Second to 256 days(programmable)
Sensor installed: Pancake SBT-11 (GMC-600)
                                         Pancake LND-7317 (GMC-600+)

Radiation detection $\alpha, \beta, \gamma,$ x-Ray

Detectable Radiation level(GMC-600 Plus) $\alpha(2.5\text{ MeV}), \beta(50\text{KeV}), \gamma,$ x-Ray(10 keV)

Detectable Radiation level (GMC-600) $\alpha(3\text{ MeV}), \beta(100\text{KeV}), \gamma,$ x-Ray(10 keV)
Instrument Background   < 0,2 pulses/s
Working Voltage   3.6-3.7V
Display   LCD dot matrix, back lighted
On board Memory   1M Bytes flash memory for data storage
Power: **Consumption**   25mW – 125mW (count rate dependant)
Power: **Supply**   3.7V Li-Ion battery / USB power
Dimensions   135 x 78 x 25 mm(5.25"x 3" x 1")

Packing List:

1. GMC-600/GMC-600+ main unit.
2. USB cable
3. Quick start guide
4. Download link for SoftGeigerCounter software and USB driver for Windows 32 and 64 bits (see Quick start guide)
5. Download link for a complete user guide in pdf version.