

# BITT Technology

## RS04/X/Web Gammameter



The gammameter, model RS-04/X-Web, developed and manufactured by **BITT TECHNOLOGY**, is designed for measuring radioactivity of the gamma radiation. It is calibrated in "ambient dose equivalent" units [ $H^*(10)$ ] and its measuring range comprises 9 decades (from 10 nSv/h up to 10 Sv/h). This wide measuring range permits detecting minor changes in the ambient natural radioactivity as well as measuring high dosage rates. The detector can be directly connected to an Ethernet network and is supplied by power over Ethernet (PoE).

### MAIN APPLICATIONS

This robust and unique detector lends itself to an extensive range of possible utilizations:

- sensor in monitoring network for early warning system covering a wide area;
- hospital surveillance at radiation therapy wards,;
- measuring unit in scientific institutions and development centres,
- supervision unit at borders, airports, railway stations and in aircrafts, etc.,
- control unit in municipal sector mainly for the instant check of accidental radiation, generated by nuclear
- industry (nuclear power plants, storage of fusionable material and truck/train transportation of such materials),
- measuring unit in private sector, especially for owners of fallout shelters.



### Software features:



- Running Linux (2.6.x).
- The acquired data is stored in a simple SQL database and/or files on a SD / microSD card
- Every Browser can act as a client.
- Configuration of the station through the web page.
- Login over Telnet and SSH is supported
- sending of data via FTP to a server (data push)
- the probe itself is running a FTP server (data pull)



for more information

[www.bitt.at](http://www.bitt.at)  
[office@bitt.at](mailto:office@bitt.at)

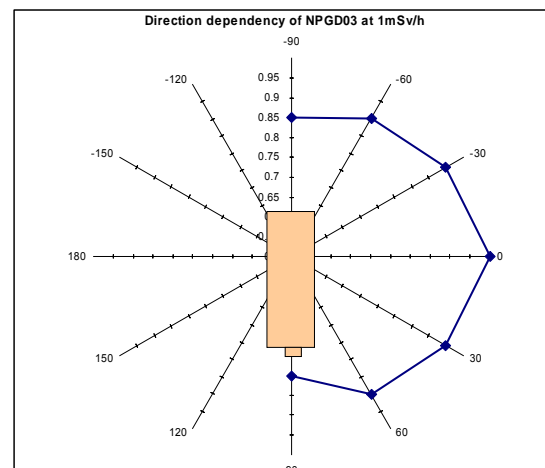
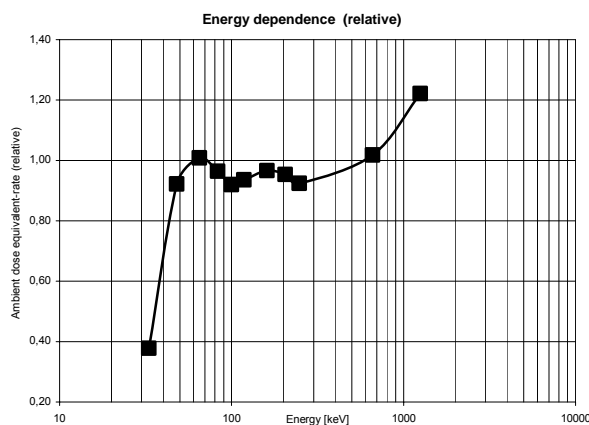
**BITT Technology**  
Wienerstr. 70  
A-2104 Spillern  
Austria

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## RS04/X/Web Gammameter



Type	RS04H/Web	RS04L/Web
Detector	Proportional counter, Type NPGD 02 with energy compensation (produced by BITT Technology)	
Microprocessors	Type C8051F022 Silicon Labs, compatible with Intel 8051 ETRAX 100 LX MCM 4+16 CPU, 32MB RAM, 8MB Flash	
Measuring range	10 nSv/h ÷ 10 Sv/h	10 nSv/h ÷ 15 mSv/h
Energy range (±30%, ref. Cs-137)	$\dot{H}^*(10) \leq 30$ mSv/h: 40 keV ÷ 3 MeV $\dot{H}^*(10) > 30$ mSv/h: 100 keV ÷ 3MeV	40 keV ÷ 3 MeV
Temperature range	-30°C ÷ +70°C	
Temperature dependence	$\dot{H}^*(10) \leq 1$ mSv/h: ±3% $\dot{H}^*(10) > 1$ mSv/h: -20%, +50%	
Measuring uncertainty	$\dot{H}^*(10) \leq 1$ Sv/h: ±10% $\dot{H}^*(10) > 1$ Sv/h: ±15%	
Output	Ethernet (10/100)	
Services		
Protokoll version	FTP (push/pull)	
Real time clock	Yes	
Data storage memory	Yes (up to 4 GB on a SD / microSD card)	
Real time data	Yes	
Power consumption	1,35W @ PoE with IEEE 802.3af compliant power supply (phantom and spare supported)	
Dimensions	Ø76 mm x 500 mm	
Mass	ca. 2,5 kg	



Technical modifications are subject to change



for more information  
[www.bitt.at](http://www.bitt.at)  
[office@bitt.at](mailto:office@bitt.at)

**BITT Technology**  
 Wienerstr. 70  
 A-2104 Spillern  
 Austria