

>> NEW <<

Gamma**TRACER XL**

... utmost sensitivity for gamma monitoring networks



- 10 times higher sensitivity of Gamma**TRACER** Wide
- Measuring range from 10 nSv/h to 10 Sv/h
- Various data transmission modes:
 - offline:*
 - Infrared: 0 to 10 m
 - online/offline:*
 - RS 232 interface: 0 to 15 m
 - RS485 interface: 0 to 500 m
 - SkyLINK (radio module): up to 100 km
 - DataGATE (GSM, Ethernet): worldwide
- Battery lifetime time up to 5 years
- Rugged, reliable and hermetically sealed housing

More than 80 probes installed . . .

. . . in the gamma surveillance network of Schleswig-Holstein (Germany)

GammaTRACER Technical Data

Radiological Specifications	GT-BASIC	GT-WIDE		GT-WIDE-XL		GT-HIGH
<i>Type GM Tube 1</i> Number of pulses at 100 nSv/h in 10 min	GM, 70003A/E 150 pulses	GM, 70003A/E 150 pulses		GM, 70031A/E 1100 pulses		GM, ZP1301/1304 2 pulses
<i>Type GM Tube 2</i> Number of pulses at 100 nSv/h in 10 min	GM, 70003A/E 150 pulses	GM, ZP1301/1304 2 pulses		GM, ZP1301/1304 2 pulses		GM, ZP1301/1304 2 pulses
Measurement range	10 nSv/h to 10 mSv/h (1 µR/h to 1 R/h)	10 nSv/h to 10 Sv/h (1 µR/h to 1000 R/h)		10 nSv/h to 10 Sv/h (1 µR/h to 1000 R/h)		1 mSv/h to 10 Sv/h (100 mR/h to 1000 R/h)
Energy range	45 bis 1350 keV (±30%)	45 bis 1350 keV (±30%)		45 bis 1350 keV (±30%)		45 bis 1350 keV (±30%)
Intrinsic effect	<10 nSv/h (elec. comp.)	<10 nSv/h (elec. comp.)		<10 nSv/h (elec. comp.)		
<i>Calibration inaccuracy :</i> 0 to 0,1 mSv/h (0 to 10 mR/h)	<i>GM Tube 1 & 2</i> < 6%	<i>GM Tube 1</i> < 6%	<i>GM Tube 2</i> -	<i>GM Tube 1</i> < 6%	<i>GM Tube 2</i> -	<i>GM Tube 1 & 2</i> -
0,1 mSv/h to 10 mSv/h (10 mR/h to 1 R/h)	< 15%	< 15%	< 15%	-	< 15%	< 15%
10 mSv/h to 100 mSv/h (1 R/h to 10 R/h)	-	-	< 15%	-	< 15%	< 15%
100 mSv/h to 10 Sv/h (10 R/h to 1000 R/h)	-	-	< 15%	-	< 15%	< 15%
Statistical error (1 Sigma) at 100 nSv/h (10µR/h), 60 min cycle	< 3%	< 4%	-	< 1,5%	-	-
Other Specifications (all types)						
Temperature range	-20°C...+50°C (-4°F ... 140°F), opt. -40°C...+60°C (-104°F ... +158°F)					
Protection class (Basic, Radio)	Hermetically sealed (Cable versions: IP67)					
Mean time between failure (MTBF) at 200 nSv/h	> 1 000 000 h					
<i>Data Storage</i>						
Length of cycle	1, 2, 5, 10, 15, 30, 60, 120 min					
Storage capacity	12 800 values (up to 1.060 days - depending on measuring cycle)					
Data Transmission (Range)						
Infrared	up to 10 m					
RS232 interface	up to 15 m					
RS485 interface	up to 500 m (without a Repeater)					
Radio module	up to 100 km (60 miles)					
DataGATE (GSM, Ethernet)	worldwide					
<i>Power Supply</i>						
Operating time at a measurement cycle of 60 min (at 200 nSv/h)	35 000 h, typically 5 years, guaranteed 3 years					
<i>Mechanical Specifications</i>						
Dimensions (diameter / length)	60mm * 665 mm, XL type incl. radio module: 60mm * 1120 mm					
Casing material	Aluminium, anodized, wall thickness of 1 mm					
Weight	950 g, XL type incl. radio module : ca. 1600 g					
<i>Cable Interface</i>						
Ext. power supply	RS232			RS485		
	--			12V / 500 mW		
Max. cable length	15 m			500 m (longer on request)		
Galvanic isolation	1 000 V			1 000 V		
Interface with GSM/ISDN/analog modem	via DataGATE			via DataGATE		

Status 01/10/02