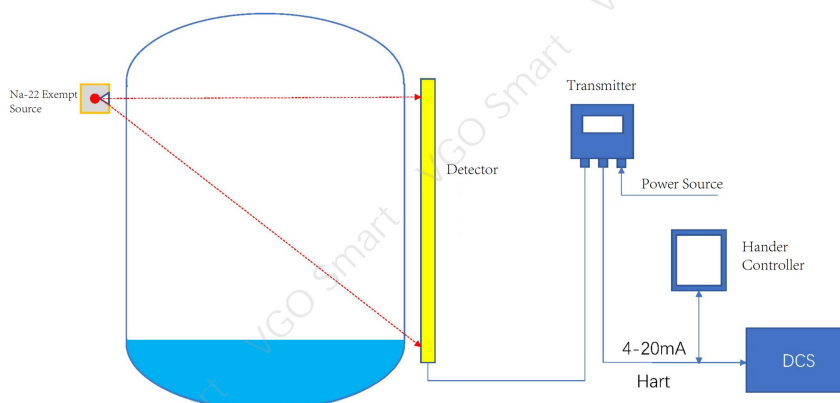


## Na-22 Nuclear Exempt Level Measurement ( DPRO-66 )

Na-22 Level Measurement gives full play to the technical advantages of VGO Intelligence in the field of industrial nuclear measurement technology, so that exempt grade Na-22 radioactive source can be used in special material level measurement occasions. Because of the use of radioactive sources with exempted activity, customers can purchase and use nuclear material level meters without having to go through environmental procedures. Suitable for high temperature, high pressure or vacuum and other extreme environment, corrosion, abrasion, high viscosity, highly toxic media limit monitoring, products possess fast response, high reliability, low radiation, high safety, environmental protection exemption, environmental assessment exemption, free from environmental regulation.

### Ultra High Sensitivity Level Measurement System

Adopt DET-7000 or DET9000 series ultra-high sensitivity detector and intelligent transmitter TRA-9861 to detect and analyze low-intensity gamma rays of Na-22 through the pipe and medium, the system can directly output medium density/concentration, it can also output mass flow rate with volume flow meter.



## Product Features

- Users do not need to go through environmental procedures when using exempt radioactive sources.
- Equipped with 4.3-inch HD LCD screen, Chinese interface, simple operation, smooth operation.
- Advanced friendly user interface, with detailed calibration, measurement, diagnostic information.
- Magnetic switch button can be used to operate without opening the cover of the instrument, especially suitable for dangerous applications.
- Optional continuous level, level switch alarm output and other measurement output mode
- Intelligent instrument, with temperature monitoring, fault self-diagnosis, radiation attenuation automatic compensation and other functions.
- Powerful extension function, support manufacturers remote diagnosis, remote debugging. Through PROWIN debugging software, one-key back up and restore of system parameters are realized to ensure data security.
- The instrument can be controlled remotely to further enhance the automation and safety level of the factory.
- Through PROWIN debugging software, the system parameters can be backed up and restored with one click to ensure data security
- The use of long detectors can better improve the linearity of material level measurement, significantly reduce the number of Na-22 exempt sources used, and reduce management costs

## Application

Ore Pulp : Aluminium Ore 、Copper Ore 、Gold Ore 、Potassic Salt Ore 、Phosphorite 、

Coal Mine 、Calcium Deposits 、Lime

Chemical : Acid Content 、Polymer 、Synthesis of Ammonia & Urea

Pulp & Paper : White Liquor 、Black Liquor 、Green Liquor

Oil Refining : Crude Oil Density 、Product Oil Density

Food : Soy Sauce 、Tomato Sauce 、Orange Juice 、Starch 、Syrup

Water Treatment : Mud

## Technical Parameters

Technical Parameters		
Performance Specification	Measuring Range	The measurement range of a single detector is 0-3000mm; A larger range can be achieved by adding detectors, up to 16 detectors.
	Measuring Accuracy	Full Range's $\pm 1\%$
	Electromagnetism/Radio-frequency Interference	The test has no effect on the output
	Power Effecton	Within the power supply range, no effect on operation
Functionality Specification	Power Source	230V AC $\pm 10\%$ (50/60HZ) 18-32V DC
	Power Dissipation	Maximum 25W
	Output Signal	4-20mA+Hart,used for density, concentration or mass flow output
		2 channel relay output for process alarm or fault alarm
	Communication Interface	2 channel RS485
	Input Signal	4-20mA, used for flow signal input
	Operating Temperature	-40°C-80°C , recommended to use water-cooled jacket when the temperature exceeds 80°C for a long time
	Protection Level	IP65/66
	Explosive-proof Grade (Optional)	EXIICT4
	Linearization	Single point/multi-point calibration

	Time Constant	1-999s
Detector	DET-7000 or DET-9000	Ultra high sensitivity detector
	Electrical Connection	Aviation plug、M20 1.5、1/2NPT
	Shell Material	304、316L stainless steel
Radioactive Source	Category	Na-22
	Activity	$\leq 27\mu\text{Ci}$ (in line with the national environmental protection exempted activity)
	Half-life Period	2.6 Years
	Ray Type	$\gamma$ Rays
Source Container	Material	Cast iron shell+ Lead shielding material
	Dimension	$\Phi 150 \times 80$
	Weight	10Kg

### System Composition:



**Na-22 Exempt Source**



**TRA-9861 Transmitter**



**DET-7000 Ultra-high sensitivity  
point detector**



**DET-9000 Ultra high sensitivity  
long detector**

### Contact Us

Nanjing VGO Smart Technology Co.,LTD

Website: [www.vgosmart.com](http://www.vgosmart.com)

Address: Building 4, 3rd floor, Liando U Valley III, 7 Tonglian Road, Jiangning District, Nanjing, China

TEL: +86-25-52134872 Phone No.: +86-15295785359 FAX: +86-25-52169557