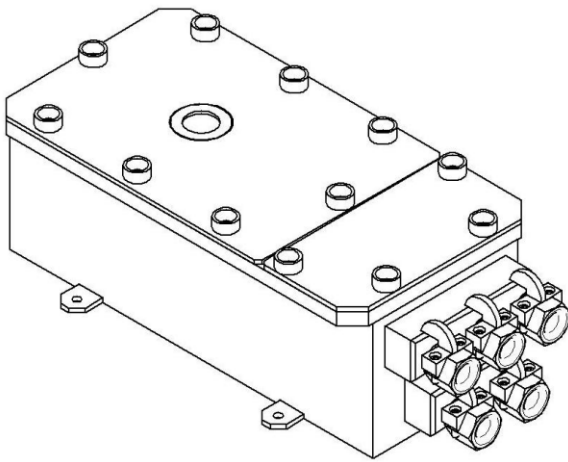




## DAN-01 mine anemometer

 **Certificate: ATEX**



### Application:

The DAN-01 anemometer for mines is designed to evaluate the speed and direction of gas flow using the AN-01 measuring probe. It is meant for use in mines (underground and surface areas) with a risk of methane explosion.

### Description:

The system consists of the AN-01 gas flow sensor and evaluation unit and is further divided up into the DAN-01 mine part and the RM1-DAN-01 surface part. The mine part is placed in steel casing (explosion proof). The surface part is constructed in a standardized wall-mounted cabinet. Both parts of the evaluation unit are interconnected with an intrinsically safe two-wire telephone line. The function is changed by changing the software operating system. This equipment requires no operator.

### RM1-DAN-01

The electronics consist of the power supply, convertor on the level of an intrinsically safe telephone line to an intrinsically safe telephone line and a convertor from the telephone line to the RS232.

### DAN-01

The electronics consist of a fuse, power supply, intrinsically safe convertors and operating system for calculating the velocity of the gas and determining its direction. The operating system provides communication to the surface part of the system through an intrinsically safe separation of communication signals. It provides power for the optical actuator in the AN-01. Optical actuator signals are routed through the IS / NIS convertors.

### AN-01 sensor

The base for this sensor is an anemometer propeller mounted on a foot clamp, with the addition of an optical actuator and optical sensor working through rotor blade movement. To minimize friction, the propeller is secured using a needle bearing.

### Specifications of RM1-DAN-01:

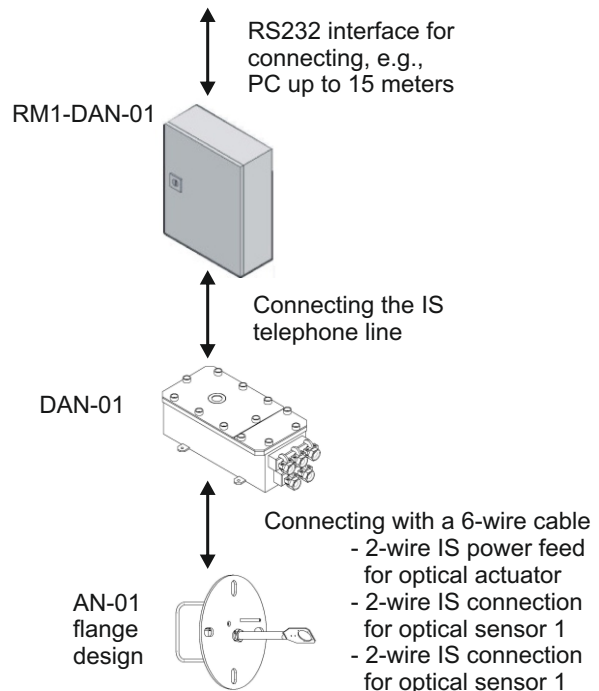
Voltage	L+PE+N, 85-264V, 50Hz
Power	6W
Maximum cable length RS232	15m
Temperature range	0 to +40°C
Case	IP44
Dimensions	200 x 300 x 155 mm
Weight	5.2kg

### Specifications of DAN-01:

Design	I M2 (M1) Ex d[ia] I
Voltage	L+PE+N, 94-265V, 50Hz
Power	17.2 W (MAX)
Diameter of cable glands	8 - 18 mm
Transmission line speed	9600 bit/s
Max. distance of transmission lines	8 km
Temperature range	0 to +40°C
Case	IP54
Dimensions	230x531x171mm
Weight	32.5 kg (MAX)

### Specifications of AN-01:

Power supply - IS	10.5 VDC
Output contacts	2x NAMUR (max 8.2VDC)
Maximum switching frequency	100 kHz
Temperature range	-10 to +55°C
Case	IP54
Dimensions	69 x 43 x 40mm
Weight	0.2kg



**The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.**