### **Greenbank Energy Solutions Inc.**

# **FlowSwitch FS 550**

Contactless flow switch for bulk solids with trend measurement



### Application

The FlowSwitch FS 550 monitors the flow of solids.

It is a robust microwave-built flow monitor that detects disturbances in the transport of powders, dusts, pellets or granules at an early stage. This helps to avoid difficulties that may occur due to clogged pipelines, loss of material or other problems with the conveying system. The compact device can be used wherever monitoring of bulk material movement is required.

### Industries

Feed industry Construction materials Coating processes Chemical industry Energy production Foundries Glass production Rubber industry Wood & pellets Lime works Ceramics production Plastics production

Food industry Metal production Minerals Pharmaceuticals Pigment production Recycling Synthetic materials Textiles Detergent industry Cement industry etc.

HUMY 300/3000 Continuous inline humidity measurement MF 3000 Microwave flow measurement FS 550 Microwave flow monitoring FS 600 Electrostatic flow monitoring FS 710/750/780 Tribo-electric dust monitoring LC 510 Microwave level monitoring

## **Greenbank Energy Solutions Inc.**

### **Advantages**

- Reliable, non-contact microwave measurement
- Works within several meters distance
- No impairment of the bulk material
- Very sensitive and responsive
- Flexible due to adjustable gain, filter,
- Easy to install and retrofit
- Wear and maintenance free
- Rugged stainless-steel construction
- 100 % safe operation due to active self-monitoring

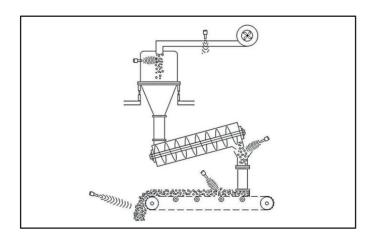
### Function

The FlowSwitch FS 550 is based on the latest microwave technology. When a material passes the sensor, the emitted microwaves are reflected. This is converted into a flow-proportional output signal for trend measurement.

The sensor can be installed in pipelines, on conveyor belts, on drop plates, on chutes, behind screws or in similar conveying equipment. It enables reliable detection of the material flow and detects insufficient or missing material, clogging or standstill - from a distance of several meters. It does not come into contact with the bulk material and is wear- and maintenance-free.

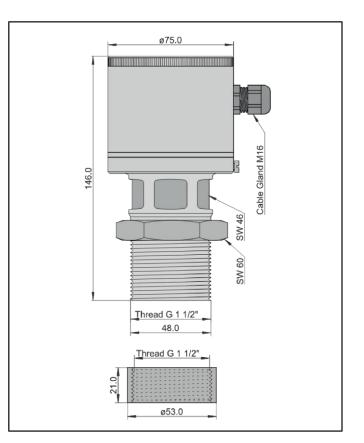
Numerous parameters, such as sensitivity and filter time, are adjustable, and the sensor can be easily adapted to any application.

The FS 550 is known as the most robust flow switch in its class. It is constructed of high-quality stainless steel and is optimized for long life. High pressure adapter allows use in the most challenging environments.



### **Technical data**

Housing material stainless steel (1.4307)	
Surface of the sensor Teflon (optionally ceramic)	
Ambient-	
Temperature	-20°C to +60°C
Process temperature	-20°C to +85°C
Process pressure	6 bar (optional 30-60 bar)
Protection class	IP65
Power supply	24 VDC (18 - 30 VDC)
Power consumption	Approx. 80 mA at 24 VDC
Transmitting power	10 dBm
Analog output	4-20mA
Electrical connection	Pluggable screw terminals
Adjustable parameters	Amplification, filters,
Parameterization	Directly on the device via keys
Indicators	LED green (in operation)
	Bar chart
	(e.g. field strength)
Max. Load	500 Ohm



### **Greenbank Energy Solutions Inc. -**

185 Plumpton Ave. Washington. PA 15301 USA Tel.: +I 724-413-4021 Fax: +1 724-229-1185 Mail: <u>mccaffrey@greenbankenergy.com</u> Web: <u>www.greenbankenergy.com</u>