RPL81 ✳
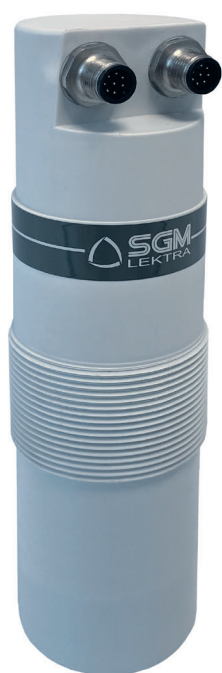## radar level transmitter

Compact unit for level measurement of liquids and solids RPL81 is unaffected by temperature fluctuations, high pressure and condensation.

Thanks to his precise signal focusing it provides a reliable and accurate measurement.RPL81 can be easily configured by: on-board push buttons (IP67 version only); VL620/621, "display/programming module"; MODBUS RTU s/w; BLUETOOTH + SGM Level APP.

4-20mA and MODBUS outputs enable the continuous transmission of the measurement to analogical and digital acquisition systems. Two configurable relays can be used as local alarm threshold and pumps drive/control. One relay can be programmed as operating alarm, making RPL81 suitable for unattended applications. Constructed entirely in PP, RPL81 is particularly indicated in presence of corrosive media (acid vapors) and therefore in storage tanks. Typical applications include water lifting and treatment plants as well as sea and rivers level monitoring.

- **Level measurement without contact for liquids and solids**
- **For liquids (max 20m) and solids (max 10m)**
- **Radar pulses 80GHz**
- **IP67/IP68 (Sensor) - IP68 opt.**
- **4÷20mA output**
- **2 configurable relays**
- **Remote control via Smartphone**

TECHNICAL FEATURES

Housing / sensor material
PP
Mechanical installation
Threaded 2 "G; flange in PP optional
IP rating
IP67 - IP68 opt.
Electrical connection
Terminal blocks or waterproof connector IP68 (opt.)
Working temperature
-30° ÷ +60°C
Pressure
from 0,5 to 1,5 bar (absolute)
Power supply
24Vdc

Power consumption
5W max; 2,5W average
Analog output
4...20mA, max 750ohm
Relays output
n°2 3A 230Vac (n.a.)
Digital communication
MODBUS RTU
Max measure range
0.05 ÷ 20mt
In case of non perfectly reflecting surfaces, the maximum distance value will be reduced

Blind distance
0,05m
Accuracy
±0,5% (of the measured distance) not better than ±3mm.
Resolution
2mm.
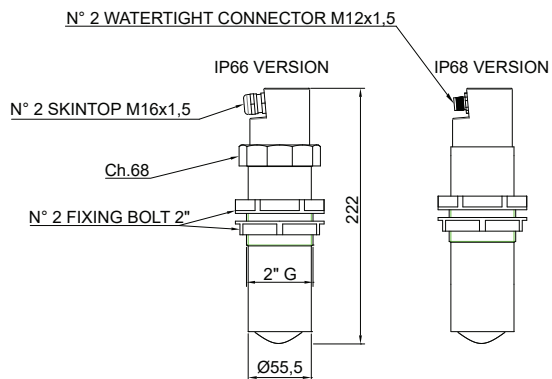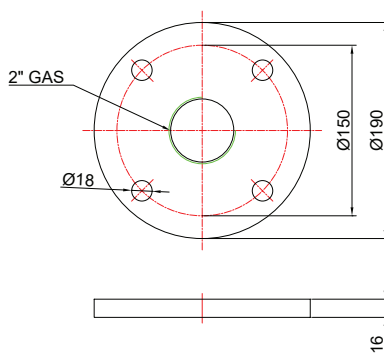**Calibration**
vers. IP67 display opt. - 2 buttons - modbus /
vers. IP68 display - modbus
Display
VL620/1 module (opt.) with 4 keys and LCD

SGM LEKTRA

N° 2 WATERTIGHT CONNECTOR M12x1,5

IP66 VERSION   IP68 VERSION

N° 2 SKINTOP M16x1,5

Ch.68

N° 2 FIXING BOLT 2"

222

2" G

Ø55,5

DN80 PN6 UNI 1092-1 flange in PP (Opt.)

2" GAS

Ø150
Ø190
Ø18

16

RPL81   Radar level transmitter

Micro-waves FMCW
For liquids (max 20m) and solids (max 10m)
Output: 4÷20mA + RS485 MODBUS
2 relays for alarms or pump control
G 2"/PP threaded connection + nr 2 2" BSP/PP fixing bolts
Calibration by 2 push-buttons, via MODBUS,
by VL620/VL621 display module (opt.),
or via BLUETOOTH (opt.)
Working temperature: -20° ÷ +60°C

Version		
1	IP67	
2	IP68	
Housing material		
B	Polypropylene (PP)	
Z	Special	
Power supply		
4	24Vdc	
5	12Vdc	
Accessories		
A	None	
B	BLUETOOTH	
C	DN80 PN6 UNI 1092-1 flange in PP (600J001T)	
D	VL620 keyboard/display programming module with 1,8 m cable	
E	Mounting bracket in PP (835B026Z)	
F	VL621 keyboard/display programming module with 1,8 m cable for versions 2 (IP68)	
S	S/W for MODBUS communication (010F105A)	
T	Couple of 5m cables with IP68 female connector (for versions 2)	
U	Couple of 10m cables with IP68 female connector (for versions 2)	
V	Couple of 15m cables with IP68 female connector (for versions 2)	
W	Couple of 20m cables with IP68 female connector (for versions 2)	
Z	Special	