

# SKE Radar Level Series

## SKR800 Non-contact FMCW 80GHz Radar Level Transmitter Model & Specification

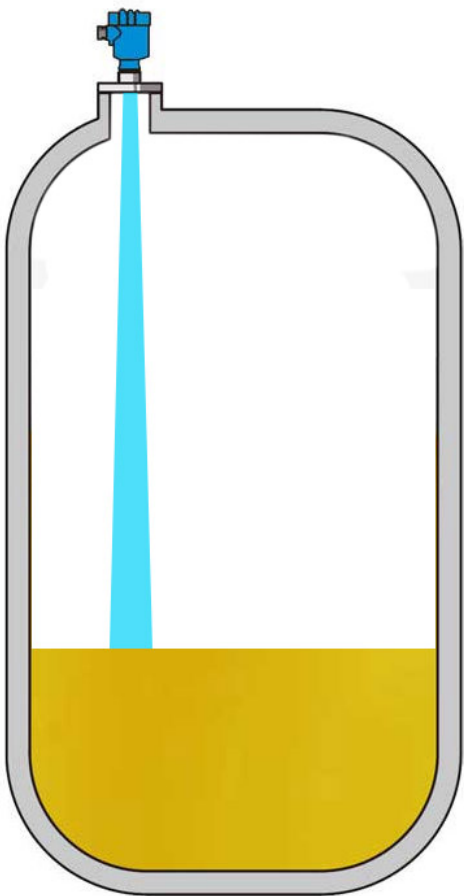


### Introduction

The SKR800, 2-wire 80 GHz Non-Contact Radar Level transmitter utilizes Frequency Modulated Continuous Wave (FMCW) technology which has greater sensitivity and accuracy for level measuring applications.

### Features

- 1. 80GHz FMCW technology.
- 2. Measuring range: up to 30 m (liquids) / 30 m (solids)
- 3. Accuracy  $\pm 2$  mm(liquid),  $\pm 5$  mm(solid)
- 4. PTFE sealed antenna, not affected by temperature, condensate water.
- 5. Narrow emitting angle  $\pm 1.5^\circ - \pm 5^\circ$ .
- 6. Small antenna size fits most process: easy to set and install
- 7. Light weight and small sized than 26GHz Radar Type
- 8. Self owned and developed software/algorithm
- 9. OEM/Customized service supported.



### Industries

- ✓ Chemical market
- ✓ Oil & Gas
- ✓ Power
- ✓ Food
- ✓ Pharmaceutical
- ✓ Water/Wastewater
- ✓ Metals, Minerals & Mining

### Application

- Liquid & Solid Level Measurement:
- ◆ Storage tanks/vessel/silo
  - ◆ Process tanks
  - ◆ Open channel water
  - ◆ River, Flume



Product Model/Options

SKR800N (80 GHz)

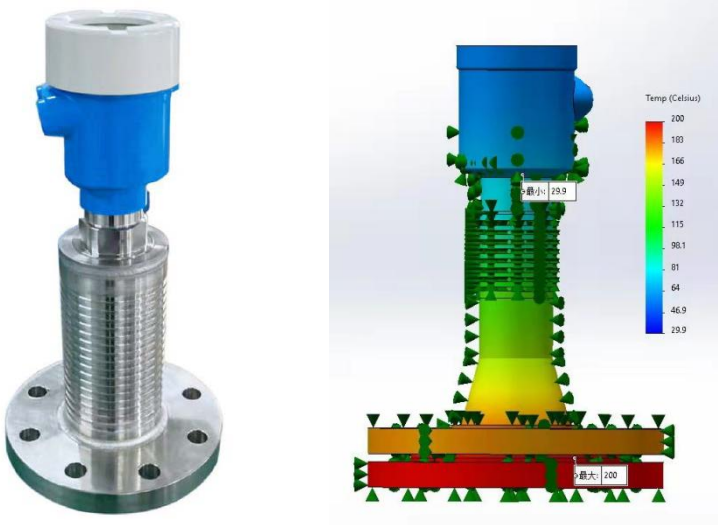
Standard liquids/Corrosive application(0-30m)

Simple solids application(0-15m)

High Temp Option:

liquids or solid at high temperature, Max: 200°C

Customized pipe length and flange size



SKR800NS (80 GHz)

Small vessels, liquid/Corrosive applications(0-15m)

Thread G 3/4

Hygienic Option:

Pharmaceutical Tank (0-15m), Hygienic fitting.

Tri-Clamp 2” or customized.



SKR800H (80 GHz)

Solids in process applications(0-30m)









SKR800W(80 GHz)

River, Rivers, Lakes, Shoals, Dam, Flume, Pits

Plastic housing, without local display (0-15m)



# SKR800 Specification

				
Model	SKR800N	SKR800NS	SKR800H	SKR800W
Product Type	FMCW Radar Level Transmitter	FMCW Radar Level Transmitter	FMCW Radar Level Transmitter	FMCW Radar Level Transmitter
Application	 *Standard liquid measurement(exp: Corrosive chemical) *Simple solid measurement	 *Simple Liquid Measurement *Suitable for small sized tank/vessel	 *Standard Bulk Solid Measurement *Suitable for Narrow tank, silo, vessel.	 *Open channel water Measurement *Standard liquid measurement(exp: Corrosive chemical)
Frequency	77GHz-81GHz	77GHz-81GHz	77GHz-81GHz	77GHz-81GHz
Measurement Range	Liquid: 0.2-30m (0.6 ft – 98 ft) Solid: 0.2-15m (0.6 ft – 49 ft) <u>*Depends on the solid substance</u>	Liquid: 0.2m-20m (0.6 ft – 65 ft)	Solid: 0.2-30m (0.6 ft – 98 ft) <u>*Depends on the solid substance</u> Water: 0.2-30m (0.6 ft – 98 ft)	Liquid: 0.2m-20m(0.6 ft – 49 ft)
Accuracy	±2mm for liquid ±5mm for solid	±2mm	±5mm for solid ±2mm for liquid	±2mm for liquid
Beam Angle	±3°	±5°	±1.5°	±3°
Antenna Material	SS 304/Sealed PTFE	SS 304/Sealed PTFE	SS 304/Sealed PTFE	Sealed PP
Process Connection	Default Thread NPT Thread customized Flange customized	Thread G 3/4 ; NPT Thread customized Flange From DN32 or customized	Default Thread; NPT Thread customized Flange customized	Default Thread; NPT Thread customized Flange customized
Process Temperature	Default: -40°C to +60°C (-40 to +140 °F) High temp: Max to 200°C (392°F )	-40°C to +60°C (-40 to +140 °F)	Default: -40°C to +60°C (-40 to +140 °F) High temp: Max to 200°C (392°F )	-40°C to +60°C (-40 to +140 °F)
Process Pressure	Normal atmospheric pressure	Normal atmospheric pressure	Normal atmospheric pressure	Normal atmospheric pressure
Signal output	4-20mA/RS485(Modbus - RTU)	4-20mA/RS485(Modbus - RTU)	4-20mA/RS485(Modbus - RTU)	4-20mA/Bluetooth
Power	Two-wire DC 24V (22V~30V)	Two-wire DC 24V (22V~30V)	Two-wire DC 24V (22V~30V)	Two-wire DC 24V (22V~30V)
Explosion-proof	Exd II CT6Gb	Exd II CT6Gb	Exd II CT6Gb	None

# SK-R800 Model Selection

SK-R800N	80GHz Radar Level Transmitter		
SK-R800NS	Code	Medium Type	
SK-R800H	L	Liquid	
SK-R800W	S	Solid	
		Code	Measuring Range(m)
		0.2~60	10、 15、 20、 30
		Code	Connection
		G	GThread
		N	NTP Thread
		F	Flange
		Code	Temperature
		N	-40-60℃
		H1	-40 - 120 ℃
		H2	-40 - 200 ℃
		Code	Cable entry
		M	M20×1.5(F)
		N	1/2 NPT(F)
		Code	Electronics
		T	Two-wire 4...20mA
		M	Modbus
		H	Hart
SK-R800			



SK-R800 Application Cases





