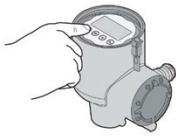
EcoStruxure™
Innovation At Every Level

# Radar for solids level measurement

## LR64 (24 GHz) and LR65 (80 GHz)

## Benefits

The new LR64 and LR65 from Schneider Electric offer customers the benefit of reliable, trouble free solids level measurement. Following an easy start-up procedure, the radars use powerful Frequency Modulated Continuous Wave (FMCW) radar technology and advanced signal processing and alogorithms to maintain accuracy. A rugged design allows both models to be used in applications featuring: product buildup, sloping material, uneven surfaces, “rat-holes” and other challenges.



*Tank height, 0% and 100% level are all that's needed for basic setup*

- M12 cable connector option lowers labor costs with quick plug and play wiring
- Quick intuitive set-up with push buttons or PACTware™ DTM
- Compatible with WirelessHART Adapter WHA-ADP2
- No moving parts ensures reliability
- No need for expensive antenna aiming kits with Drop antenna
- Drop antenna unaffected by angle of repose
- Drop and lens antennas insensitive to product buildup

## Unique features

- 2-wire, loop-powered, with HART 7
- Up to 580 psig (40 barg) process pressure
- Measuring distance up to 328 ft (100 m)
- Empty tank spectrum function
- 0.08” / ±2 mm accuracy
- Wide range of flange or thread connections
- Large, backlit LCD screen
- Dual Seal system for cQPSus-approved devices
- NAMUR NE 107 sensor diagnostics

EcoStruxure™ Process Instrumentation’s level radar transmitters offer increased performance with the highest operational efficiency and reliability in the industry.

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Life Is On Schneider Electric

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*LR64's Drop antenna shape prevents product build-up in dusty applications. A DN150 / 6" process connection results in a focused 4° beam angle.*

The LR64 Drop antenna features a closed shape and a non-stick surface made of polypropylene (PP) or polytetrafluoroethylene (PTFE). No buildup on the antenna surface eliminates the need for an air purge and extensive cleaning required by other antennas. The Drop antenna also ensures a narrower beam angle than a traditional horn or parabolic solids level antenna.

*LR65's small process connection and PEEK Lens antenna adapt to most silo nozzles. An antenna extension (length 112 mm / 4.4") is available for high nozzles.*

The 80 GHz frequency of LR65 provides dependable solids level measurement in almost all applications. A focused, narrow radar beam of 4° allows installation almost anywhere. High frequency results in a more focused signal and better reflection – increasing reliability. LR65 works in applications with dust, low-reflective media, build-up, uneven surfaces and powders.

| Approved vendor list (AVL) specifications | | |
|---|---|---|
| Manufacturer: | Schneider Electric | |
| Model number: | LR64 | LR65 |
| Measuring type: | Height measurement – Radar K-band frequency, 24 GHz | Height measurement – Radar W-band frequency, 80 GHz |
| Process temperature: | -50...+130 °C/-58...+266 °F | -50...+200 °C/-58...+392 °F |
| Process pressure: | -1...16 barg/-14.5...232 psig | -1...40 barg/-14.5...580 psig |
| Antenna type: | Metallic Horn (316L), Drop (PP), Drop (PFTE) | Lens (PEEK) |
| Power supply: | 12...30 V DC (Exi), 16...36 V DC (Exd), 2-wire | |
| Technology type: | Frequency Modulated Continuous Wave (FMCW) Radar | |
| Accuracy: | ±2 mm/±0.08" | |
| Output/communication protocol: | 4...20 mA (HART® 7) Coming soon: FOUNDATION fieldbus, PROFIBUS PA | |
| Process connection: | Thread and Flange | |
| Housing: | IP66, 68; 0.1 barg/1.45 psig | |
| Level measuring range: | 0...100 m/0...328 ft | |
| Local display: | Backlit LCD with integrated keypad | |
| Safety: | Developed acc. to SIL2/3, IEC 61508 – 2010. The SIL approval is in the process of validation by TÜV Süd, Germany | |
| Suggested applications: | Solid and granulate applications like buffer silos, hoppers, stock piles, bulk storage containers, rock crushers, blast furnace, conveyor belts with different sized rock products (stone, gravel, grid, sand), aggregates (e.g. recycled concrete or slag), iron ore, coal, coke, lime, fertilizers, granulates (PE, PP, PVC), additive fuels (e.g. dried sludge), salt, cereals, animal nutrition, coffee beans, dry yeast, woodchips. | Solid applications with extremely dusty atmospheres in high and narrow silos even with internal obstructions, bulk storage containers, buffer silos, hoppers containing fine powders (building material), cement, lime, filler, silica, gypsum, plastic powder, soap powder, fly ash, coal, flour, milk powder, coffee powder, chocolate powder, sugar, animal flour, starch, saw dust. |

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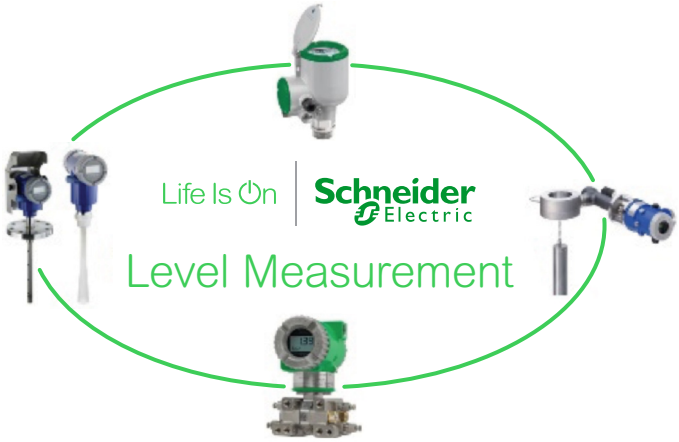
Literature:

| LR64 | LR65 |
|---|---|
| PSS : 2A-7A1A | PSS : 2A-7A2A |
| MI : 023-150 | MI : 023-152 |
| PL : 011-001 | PL : 011-001 |

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