



LR54 (24 GHz) free space radar



A reliable level “workhorse”

Benefits

The new LR54 liquids level radar from Schneider Electric features the versatile 24 GHz frequency. Designed for basic liquid, paste and slurry level measurements, LR54 provides accurate readings in closed tanks, open air applications like rivers or streams, and also in fast moving processes. LR54 is ideal as a replacement for older ultrasonics or past generation radars. It works alone or as a redundant complement to an existing level transmitter (i.e. d/p level).



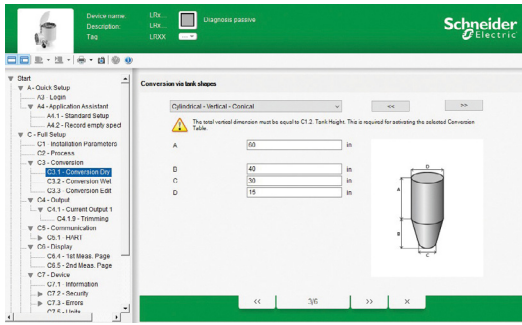
Tank height, 0% and 100% level are all that's needed for basic setup

- M12 cable connector option lowers installation 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
- Installation location versatility with small radar beam angle (5° with DN150; 6° Drop)
- Drop antenna ellipsoidal shape and smooth surface minimizes scaling, reducing maintenance costs

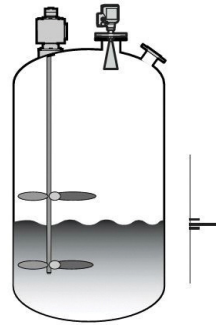
Unique features

- 2-wire, loop-powered, with HART 7
- Up to 232 psig (16 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
- NAMUR NE 107 sensor diagnostics
- Dual Seal system for cQPSus-approved devices
- Antenna extensions to suit any nozzle length

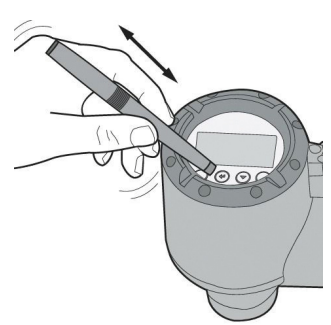
EcoStruxure™ Process Instrumentation's level radar transmitters offer increased performance with the highest operational efficiency and reliability in the industry.



A conversion table can be entered through the display or with the PACTWare DTM (shown above) to allow volume output based on standard or custom tank shapes. Volume, ullage volume, mass and ullage mass are all available as measurements. Users can select from standard units of measurement or create their own as a custom option.



Built-in filtering software can be enabled to allow the LR54 to "see" past potential obstacles or interference signals to ensure reflection from the liquid surface.



Keypad buttons with Hall effect sensors are operable with a magnet through the glass cover of the housing. LR54 can be configured and operated even in hazardous locations without shutdown.

Approved vendor list (AVL) specifications

Manufacturer:	Schneider Electric
Model Number:	LR54
Measuring type:	Height measurement – Radar K-band frequency, 24 GHz
Process Temperature:	-50...+130 °C/-58...+266 °F
Process Pressure:	-1...16 barg/-14.5...232 psig
Antenna Type:	Metallic Horn (316L), Drop (PP)
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
Suggested Applications:	Measurement of liquids such as solvents, alcohols, acids, bases, condensates, hydrocarbons, phosphorus, fuels, water, hydraulic oil, additives. <ul style="list-style-type: none"> in processes with fast changing levels (≤60 m/min; 196.85 ft/min) in closed tanks and in the open air (e.g. dams or rivers) in storage and process tanks requiring high accuracy



Schneider Electric
 38 Neponset Avenue
 Foxboro, MA 02035
 Toll free: 1-866-746-6477
 Global: +1-508-549-2424
<https://pasupport.schneider-electric.com>

Literature:
 Product Specification: 2A-7A5A
 Master Instruction: 023-153
 Parts List: 011-001

To purchase: find your local rep at <https://www.buyautomation.com/>

