

The background of the slide is a dark teal color. It features an abstract pattern of small, light teal dots and lines, primarily concentrated on the right side, creating a sense of depth and movement. On the left side, there is a vertical teal bar.

# **SITRANS LR100**

# **Radar level measurement**

[siemens.com/sitranslr100](https://siemens.com/sitranslr100)

**SIEMENS**

# Radar transmitters for liquid level measurement

## SITRANS LR200

- Low frequency
- Severe process conditions

## SITRANS LR250 PLA

- Great choice for process industries
- Ambient conditions with corrosive chemicals

## SITRANS LR250 FEA

- Extreme corrosive chemicals and high temp
- PTFE lens

## SITRANS LR250 horn

- Ideal for oil and gas
- Highest temp rating

## SITRANS LR250 HEA

- Hygienic antenna
- Variety of process connections

## SITRANS LR560

- > 30 m water applications
- Narrow beam
- Stainless steel enclosure

## SITRANS LR100 series

- Compact 80 GHz
- First choice for general industries
- Bluetooth® wireless technology



# Top highlights at a glance

## SITRANS LR100 series – first choice for general industries

### Bluetooth wireless technology



Quick and easy setup with Mobile IQ.  
Narrow beam = No fine-tuning.

### Zero blanking zone



Measurement right up to the sensor. 2 mm accuracy means you can get rid of your manual measurement techniques.

### Pioneers of technology and level measurement



Trust over 170 years of Siemens innovative engineering experience. Millions of installed instruments.

### 80 GHz custom radar microchip



Signal killer conditions such as condensation, turbulence, buildup or solids are easily measured.

### Digitalization / Industry 4.0



HART 7 or optional Modbus RTU for intelligent, value adding data to your factory or the cloud.



# SITRANS LR100 series

## Level measurement for basic inventory in general industries



Feature/Function
Bluetooth wireless technology with SITRANS mobile IQ app on your mobile device
2 mm accuracy (LR110/120/150 versions) and zero blanking distance
Custom radar microchip delivers exceptional sensitivity
80 GHz yields narrow beam
Digitalization ready with 2-wire HART 7.0 or 4-wire Modbus RTU



Benefit
<ul style="list-style-type: none"><li>• Time-saving and no specialists required</li><li>• Device status at a glance</li></ul>
<ul style="list-style-type: none"><li>• Precise measurement over entire range, accurate volume measurement.</li></ul>
<ul style="list-style-type: none"><li>• Signal killer conditions like condensation, turbulence, or buildup are no problem.</li></ul>
<ul style="list-style-type: none"><li>• No nozzle interference, no costly fine-tuning.</li></ul>
<ul style="list-style-type: none"><li>• Get status and diagnostic data immediately to your systems ensuring quality of your process and faster and intelligent data for operations</li></ul>

# SITRANS LR100 series

## SITRANS LR100 series

### Application conditions

- Ideal for liquids or solids applications with process temperatures from -40 to 80°C (-40 to 176°F)
- Gas and dust approvals available
- Submergence shield option for flooding and fouling protection

### Bluetooth wireless technology

- SITRANS mobile IQ app provides an intuitive interface to quickly configure, setup and monitor
- SITRANS mobile IQ app is compatible with Android, Apple and Windows devices



### Process connections

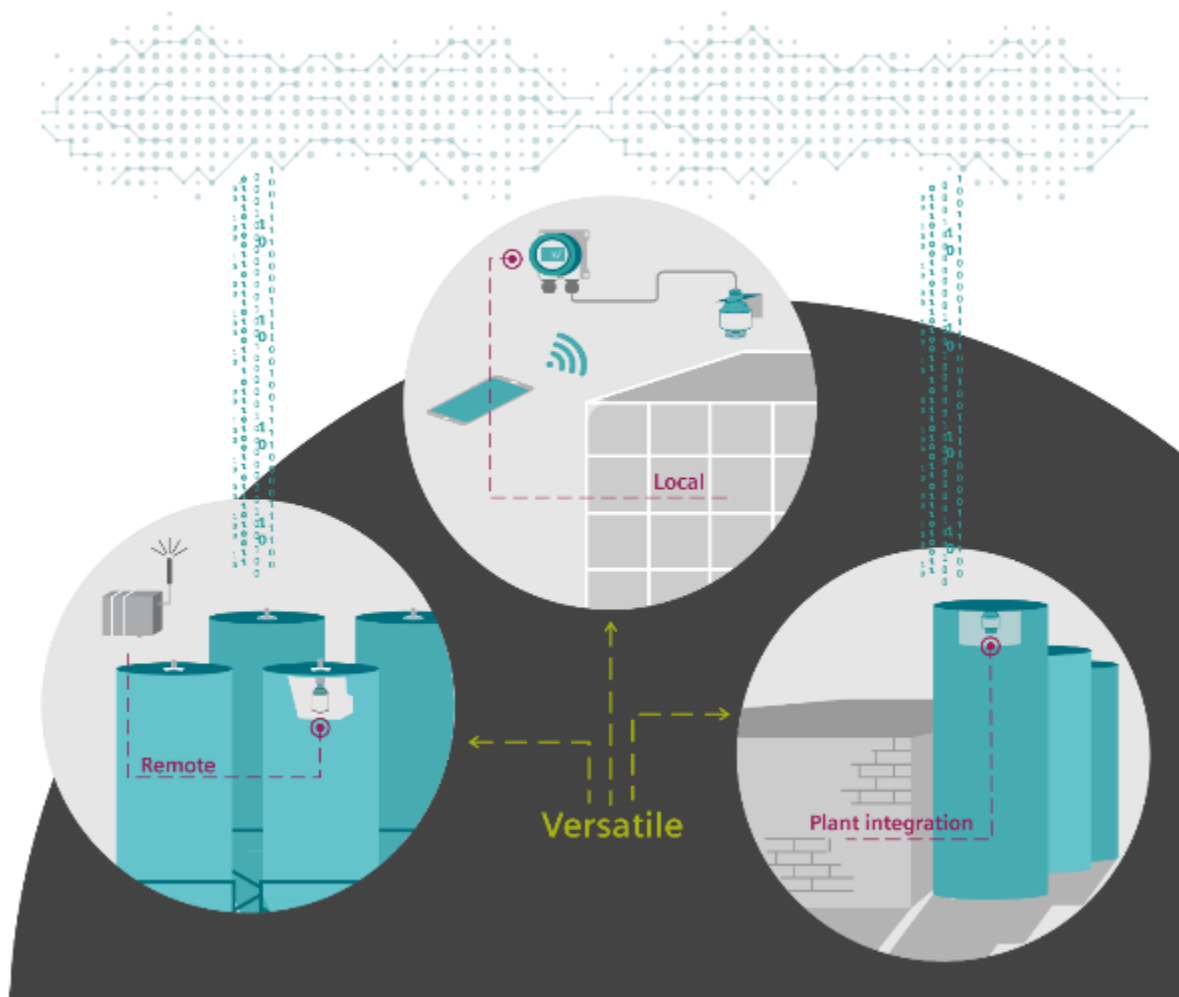
- SITRANS LR100, LR110, LR140, LR150 have 1½" NPT, BSPT, or BSPP process connection
- Top thread 1" for cable versions
- M20 or ½" NPT electrical connection for LR140 and LR150

### Communications

- All have 2-wire, 4-20 mA
- SITRANS LR110 and LR120 also have HART or 4-wire, Modbus
- SITRANS LR150 HART and optional HMI

# SITRANS LR100 series configuration options

## Remote. Local. Integrated.



**SITRANS mobile IQ App with Bluetooth wireless technology** for fast and easy setup



**SIMATIC RTU3000 series** for remote data collection and logging



**SITRANS RD150** for local readings and configure and display diagnostic data



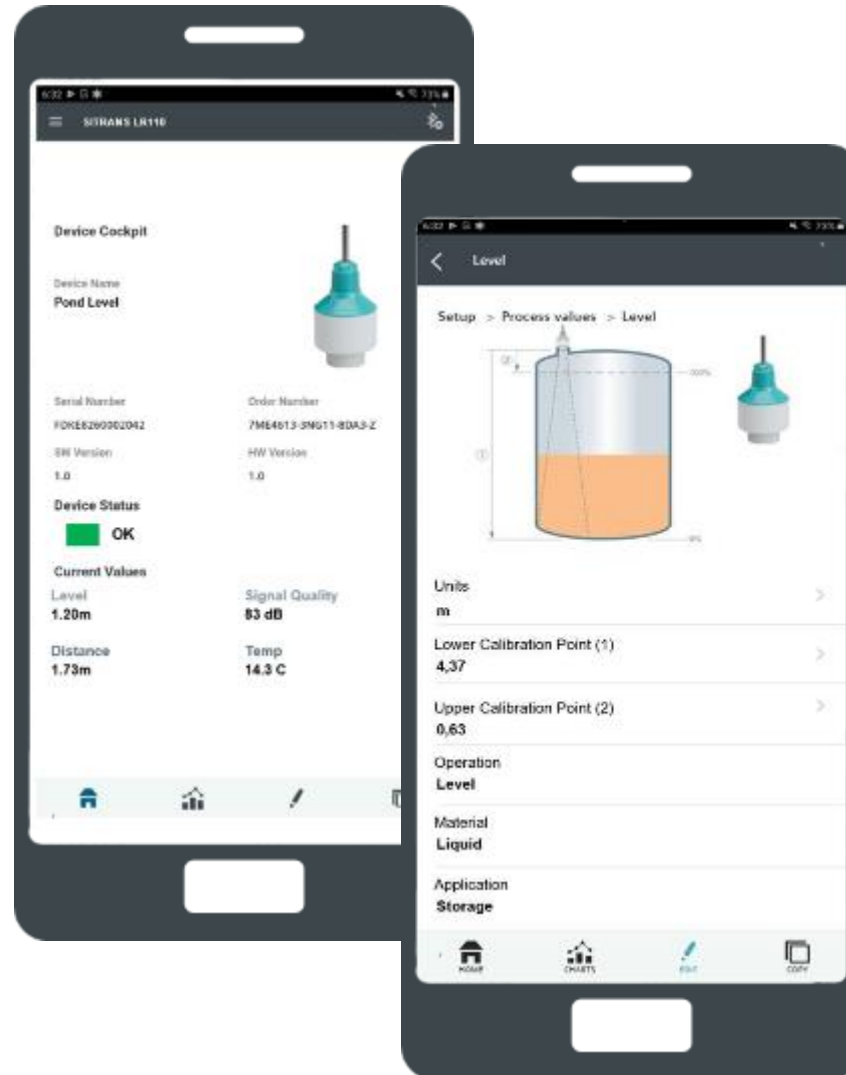
**SITRANS LT500** controller for advanced local display, pump control and communication features



**SIMATIC PDM** for asset management, configuration and diagnostics

# SITRANS LR100 series

## Easy and fast setup with SITRANS mobile IQ



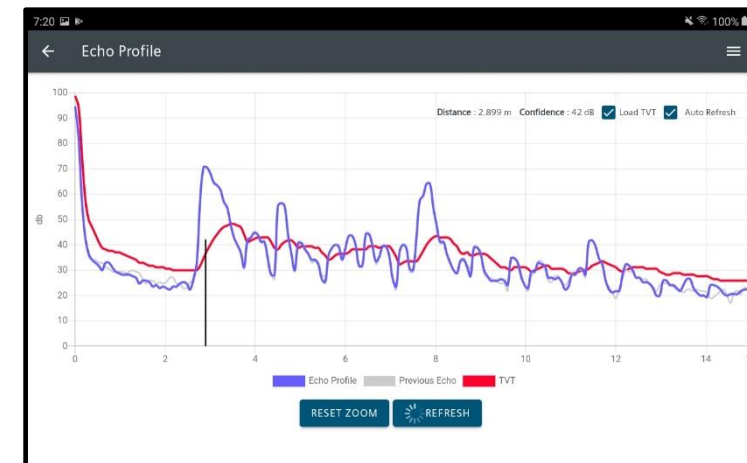
Easy setup

Connect

Enter security PIN supplied  
with device

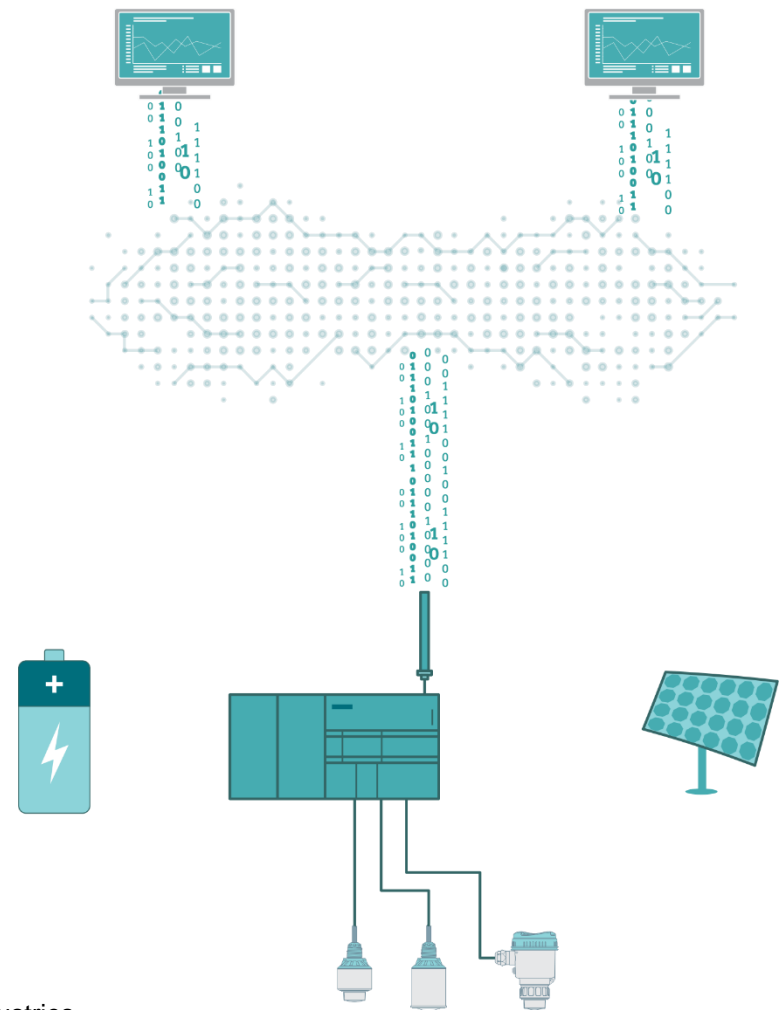
Follow basic setup

Done!



# SITRANS LR100 series – secure industrial protocols and remote diagnostics with RTU 3030

Remote instrumentation diagnostics
HART IP
Modbus IP



Secure industrial protocols supported
email
Telecontrol
FTP
SMS
DNP3
IEC



# Want a traditional controller and digitalization? We got you covered



**Simple to complex application**



**All level  
measurement  
technology**



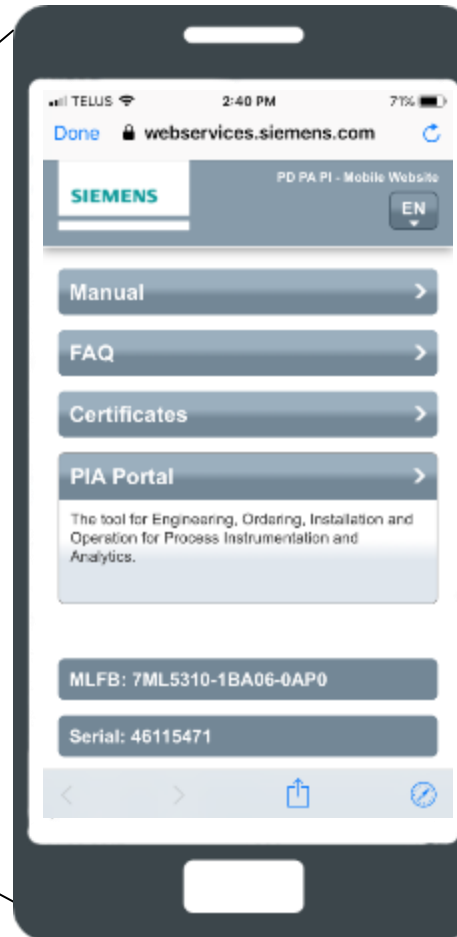
**Advanced controller**



**Integration into  
digitalization**

# SITRANS LR100 series

## Device-specific information at your fingertips



### QR code link to support site

Get critical information about your transmitter directly from the QR code, including:

- Manual
- FAQ
- Certificates
- PIA Portal
- MLFB number
- Serial number

## SITRANS LR150 optional HMI



### Blind lid

- Cost-effective solution, where an HMI is not required
- HMI could be added later if needed

### HMI included

- Easy to use Quick Start wizard
- Easy-to-use push buttons for configuration
- Parameterization same as SITRANS Probe LU240

# SITRANS LR100 series accessories



## SITRANS RD150 and SITRANS LT500

SITRANS RD150 not only displays readings from your HART instruments, it can also configure and display diagnostic data. SITRANS LT500 brings advanced pump control to your SITRANS LR100 series installation.



## Submergence shield

Used in applications where flooding and fouling is expected, for example wastewater wet wells.



## Mounting accessories

Pre-engineered mounting brackets remove the need for Custom designs and allows quick and easy installation on liquids applications.



## Easy Aimers

Accurately positioning the transmitter at the correct angle for solids level measurement is easy with these Easy Aimers.



# SITRANS LR100 series

## Level measurement for general industries

### Product data overview

	SITRANS LR100	SITRANS LR110	SITRANS LR120
	7ML530	7ML531	7ML532
	Basic measurement to 8 m, integrated 8m cable	Versatile version with communication and hazardous approval options and increased range to 15m, optional cable lengths	Narrow beam and longest range version to 30 m. Submergence shield option for flooding protection, optional cable lengths
Measuring principle	78-82 GHz, FMCW	78-82 GHz, FMCW	78-82 GHz, FMCW
Measuring range	8 m (26 ft)	15 m (49 ft)	30 m (98 ft)
Process connection	Thread 1½" and 1"	Thread 1½" and 1"	Thread 1"
Process pressure	-1 to 3 bar	-1 to 3 bar	-1 to 3 bar
Process temperature	-40 to 60°C (-40 to 140°F)	-40 to 80°C (-40 to 176°F)	-40 to 80°C (-40 to 176°F)
Accuracy	5 mm (0.2")	2 mm (0.08")	2 mm (0.08")
Beam Angle	8°	8°	4°
mA/Loop, Communications	2-wire, 4 to 20 mA	2-wire, 4 to 20 mA/HART or 4-wire, Modbus	2-wire, 4 to 20 mA/HART or 4-wire, Modbus
Ex approvals	no	Gas and dust	Gas and dust

# SITRANS LR100 series

## Level measurement for general industries

### Product data overview

	SITRANS LR140	SITRANS LR150
	7ML533	7ML534
	Basic measurement to 8 m	Versatile version with communication and hazardous approval options, increased range to 15 m and optional HMI
Measuring principle	78-82 GHz, FMCW	78-82 GHz, FMCW
Measuring range	8 m (26 ft)	15 m (49 ft)
Process connection	Thread 1½" NPT, BSPT, or BSPP	Thread 1½" NPT, BSPT, or BSPP
Process pressure	-1 to 3 bar	-1 to 3 bar
Process temperature	-40 to 60°C (-40 to 140°F)	-40 to 70°C (-40 to 158°F)
Accuracy	5 mm (0.2")	2 mm (0.08")
Beam Angle	8°	8°
mA/Loop, Communications	2-wire, 4 to 20 mA	2-wire, 4 to 20 mA/HART
Ex approvals	no	Gas
Optional HMI	no	Yes, with Quick Start Wizard and diagnostic support

## SITRANS LR100 series

### Measurement through plastic vessels



#### IBC tank applications

Non-intrusive measurement through the plastic vessel top.

Wall bracket option facilitates easy installation.

SITRANS RD150 for local display option

## SITRANS LR100 series Short-medium range solids



### Solids applications

Ultrasonic or SITRANS LR100 series are good options.

Rugged encapsulated design

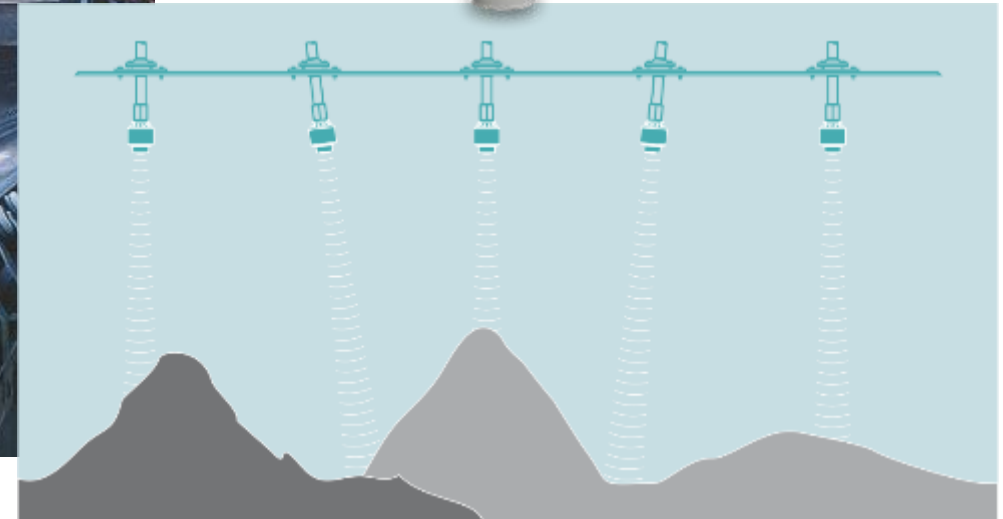
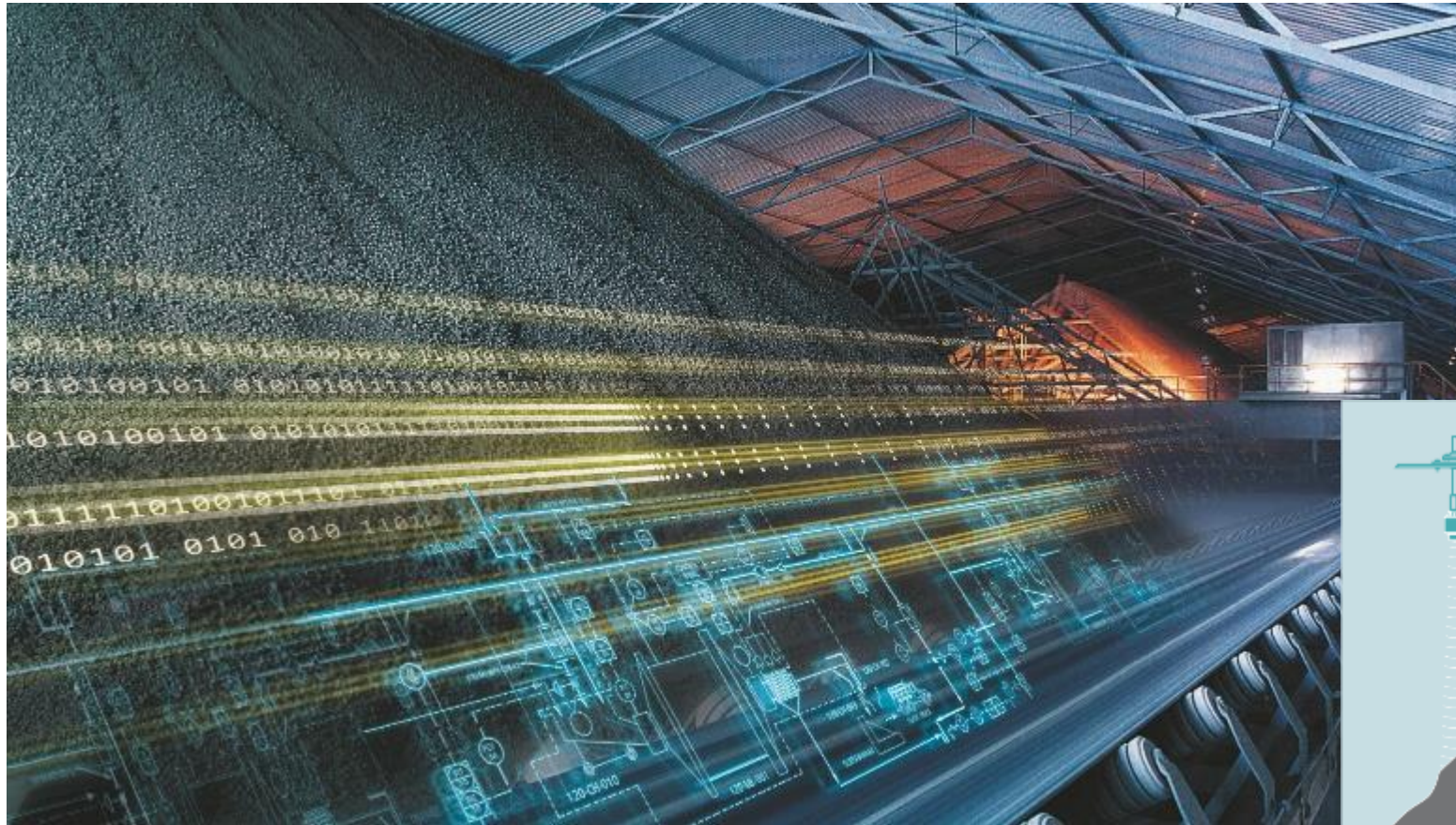
Easy aimer option allows aiming to desired point on surface

Quick update rate is suitable for crushers



# SITRANS LR100 series

## Solids measurement



# I Thank you for your attention!

**For further information and support, please contact:**

Mr. Nguyen Van Duc

Digital Industries – Process Automation

Siemens Vietnam

Email: [nguyen-van.duc@siemens.com](mailto:nguyen-van.duc@siemens.com)

[www.siemens.com.vn](http://www.siemens.com.vn)

[www.facebook.com/Siemens.Vietnam](https://www.facebook.com/Siemens.Vietnam)