



## **INTRODUCTION TO 140 GHz RADAR LEVEL TRANSMITTER WITH 2 DEGREE BEAM ANGLE**

**Please find attached below a brief description on 140 GHz Radar Level Transmitter**

We would like to introduce our **140 GHz Radar Level Transmitter** as per the enclosed details which is **the WORLD's HIGHEST FREQUENCY RADAR (with Beam Angle of 2 Degree)** and also has an **inbuilt 2 Axis Inclinator**.

Our 140 GHz Radar Level Transmitter provide solution for Level Measurement for typical applications where there is fast filling and empty rate, **high temperature MOLTEN METAL LEVEL MEASUREMENT upto 1600 Degree C, pressure and difficult to measurement medium characteristics like low di-electric, for Silo and Bunkers with Critical Solids/ Powders ad Liquid Applications**. We have done successful installations of the same in mining industries, chemical, power and glass industry, and rubber industry where the applications are critical and conventional level measurement solutions are not providing optimal solution.

Please find enclosed herewith few details on our above solution.

We shall be grateful if you kindly consider the same for your various applications. Thanking you in anticipation of above assuring you of our best services at all times.

Yours faithfully,  
**Team EIP**



# RADAR LEVEL TRANSMITTER



# ULM-31A1-HF

Frequency up to **140 GHz!**



THE NEW RADAR LEVEL TRANSMITTER PROVIDING THE MAXIMUM RELIABILITY OF MEASUREMENT OF LEVEL.

Radar level transmitter ULM-31A1-HF is an absolutely new level transmitter! It has extremely narrow beam 2° and wonderful sensitivity! It perfectly measures level of loose materials and liquids. It came up very well in solving difficult tasks!

#### Main technical characteristics

- accuracy of level measurement  $\pm 3$  mm
- operational frequency 120-140 GHz
- beam width 2°
- environmental temperature -40...+50° C
- measurement range 0,6-50 m
- Bluetooth
- built in real time clock
- keeping of debugging records in non-volatile memory
- storage of calibration tables and recalculating of level into volume

**ULM-31A1-HF**

**is recommended for work  
in process control systems.**

#### Official international dealers:

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# ULM-31A1-HF

## technical characteristics

Principle of measurement	Non-contact RADAR, FMCW
Level measuring accuracy	$\pm 3$ mm
Measuring beam width	2°
Range of level measuring	0,6 – 50 m
Environmental temperature	from -40 to +50° C
Additional thermal error	not detected
Temperature of measured medium	temperature has no influence on measuring accuracy
Contact with container interior	not required – can be fully isolated from the tank interior content by the radiotransparent layer
Measurements` dependence on dust level	not detected
Measurements` dependence on evaporation	not detected
Embodiment	IP65
Power supply	24 VDC
Output analog interface	4-20 mA
Output digital interface	RS485 (Modbus RTU), HART
Wireless interface	Bluetooth
Discrete output	2 relay contacts
Built in real time clock	
Keeping of debugging records in non-volatile memory	
Storage of calibration tables and recalculating of level into volume	
Weight	6 kg

