

1. Description of the item: Laser Type Level Transmitter

2. Detailed specifications:

SL. No.	Description	
1	Measurement	Level
2	Type	Non- Contact
3	Principle	a pulsed laser to perform time-of-flight measurement
4	Application	Solid/Liquid
5	Range	solids at up to 10 m and liquids at up to 10 m
6	Process fitting	DN 50 PN 16 flat face
7	Operating temperature	-40 to 60 °C (-40 to 140 °F)
8	Process pressure	-1 to 2 bar (29 psi)
9	Accuracy	11 mm (0.4 in)
10	User Interface	Through-the-glass HMI
11	Resolution	5 mm (0.2 in)
12	Measuring beam	Laser wavelength: 905 nm, eye safe, Class 1
13	Laser beam divergence	<0.3°
14	Housing material	Powder coated aluminum
15		
16	Vibration resistance	Compliant with IEC 60068-2-6:2007 Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal), 10-150 Hz 0.35mm-50m/s ²
17	Output	4 to 20 mA
18	Power supply	15.5 to 30 V DC
19	Weight of standard model	Aluminum housing with universal aluminum flange: 3.7 kg (8.2 lb)
20	Mean time between failures (MTBF)	25 years
21	Display	Integrated 128 × 64 pixels LCD display with through-the-glass (TTG) interface
22	Total optical aperture	50 mm (2 in)
23	Standard window material	Tempered borosilicate glass
24	Electrical Connection	½ in NPT
25	Heated window	With heated window – requires 24 V input
26	Communication Protocol	HART 7

2.1.1 Inspection and Test requirements for all above items:

- a) Calibration.
- b) Repeatability, Hysteresis effect.
- c) Span & zero adjustment checks Test with Hand held communicator (HART).
- d) Range ability check.
- e) Dimensional.
- f) Material testing (Chemical & Physical Properties).

2.1.2 Documents to be provided:

- a) Calibration test certificates.
- b) Material test certificates.
- c) Operation & maintenance and servicing manual.

2.1.3 Packing & Shipping:

- a) Adequate protection shall be provided to prevent mechanical damage and atmospheric corrosion in transit and at the jobsite.

3 Special Instructions:

Bidder should submit a certificate of compliance to all the technical specifications listed above for the offered item. Deviations should be clearly indicated, and supporting technical catalogues should be attached.