

Dry Bulk & Solids
Non-Contact Laser Measurement

Laser Level & Volume Measurement

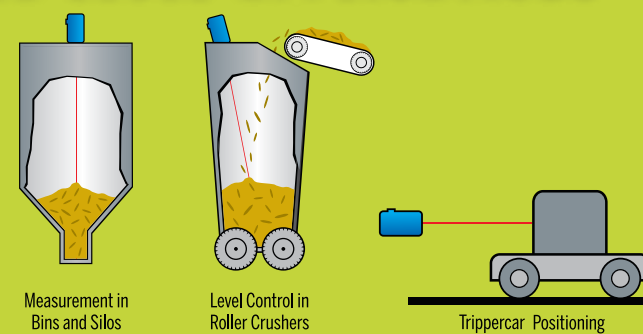
Light Years Ahead

MAJOR LASER APPLICATION FEATURES

- Non-contact, continuous measurement
- Lasers are not affected by dielectric constant
- Does not depend on air, temperature, pressure, or ambient noise
- Narrow beam ensures accurate measurement in conic bottom silos
- Measure great distances up to 1300 ft (459m)
- Optional high temperature/high pressure sight glass for continuous measurement in reactor vessels
- Over 15,000 installations worldwide

TYPICAL LASER LEVEL APPLICATIONS

Inventory in silos
Blending hoppers
Reactor vessels
Level control
Volumetric measurement
Various dry bulk solids and opaque liquids in silos



K-TEK

LASERMETER™
Series



	LM™80	LM™200	SS™140XP	LM™2D	LM™3D
Product Category	level (solids, opaque liquids) position		level (solids, opaque liquids)	volume (solids)	
Measuring Range	100 ft (30 m) level 500 ft (150 m) positioning	200 ft (60 m) level 1312 ft (400 m) positioning	240 ft (75 m) level	33 ft (10 m)	115 ft (35 m)
Beam Divergence	<0.5°	<0.2°		<0.2°	
Laser Power	optional for level built-in for positioning	built-in standard		built-in standard	
Enclosure	dual compartment aluminum or stainless steel IP66, NEMA 4X		dual compartment powder-coated aluminum or stainless steel, explosion proof, IP67, NEMA 4X	dual compartment powder-coated aluminum, IP65	
Resolution	+/- 0.4 in. (10 mm)			N/A	
Accuracy	+/- 1 in. (25 mm)			volumetric 0.5% to 1.5% typical	volumetric 1% typical
Power	16 - 32 VDC	110/220 VAC or 16 - 32 VDC	16 - 32 VDC	24 VDC @ 1.5 A	
Output	4-20mA active, NAMUR compliant	4-20mA active, isolated NAMUR compliant	4-20mA, current sync, NAMUR compliant	4 dedicated 4-20mA, active NAMUR compliant	
Communication	RS232 for set-up and troubleshooting		HART	RS232 for set-up, troubleshooting and monitoring	
Switching Output	2x SPST programmable relays 1 Amp		no relays	no relays	1x SPST relay
Optical Aperture-Min. Process Opening	3 in. (75 mm)	4 in. (100 mm)	3 in. (75 mm)	3 in. (75 mm)	
Laser Safety	Class 3R			Class 3R	
Approvals	FM Cl1 Div 1 & 2 Gr A, B, C, D DIP CL I/II/III Div 1 GP E, F, G Atex Ex nA nC II T4 Ex tD A21 IP66 T85°C CSA Cl1, Div 1, Groups A, B, C, D Ex nA nC T4; Ex tD A21 T85°C (-20 ≤ Tamb ≤ -60°C)	DIP Cl I/II/III Div 1 Gr E, F, G	FM Cl1 Div 1 & 2 Gr A, B, C, D DIP CL I/II/III Div 1 GP E, F, G	Ex tD A21 IP66 T85°C SAE S/07-393X	

www.kteksolidslevel.com



K-TEK Instruments (Pty) Ltd.
Gauteng, South Africa
+27 82 327 4555

K-TEK Level Eng. Pvt. Ltd.
Mumbai, India
+91 022 4156 6100

K-TEK (Tianjin) Level Co., Ltd.
Tianjin, China
+86 22 59613068

K-TEK BV
Rijswijk, The Netherlands
+31 70 3199700

K-TEK Solids Level
Houston, TX USA
+1 (713) 462.7665

K-TEK Corp.
Prairieville, LA USA
+1 (225) 673.6100

K-TEK
The Leader in Level Detection

K-TEK Solids Level
6100 West by Northwest #140
Houston, TX 77040 USA
Tel: (1) 713.462.7665 | fax: (1) 713.462.7684
www.kteksolidslevel.com

KTEK
18321 Swamp Road | Prairieville, LA 70769
800.735.5835 | fax: 225.673.2525
sales@ktekcorp.com | www.ktekcorp.com

K-TEK

K-TEK

Is a leading global manufacturer

of state-of-the-art instrumentation for bulk solids and liquids level detection. The company has over 350,000 installations worldwide in such applications as: pulp and paper processing, mining and construction, food and beverage manufacturing, oil and gas production and chemical processing. K-TEK operates offices, service locations, and R&D facilities around the world.

K-TEK focuses its extensive engineering, manufacturing and applications expertise exclusively in the area of level measurement. Year after year, the company pushes the leading edge of technological innovation. With its consistent commitment to R&D, it boasts one of the largest investment per revenue ratio of any level company in the world.

K-TEK is also committed to the highest degree of product quality and customer service, which is exemplified in the solutions oriented approach that is taken with each individual customer. K-TEK is set apart from the competition by its ability to design and manufacture equipment for some of the toughest industry applications. The company continues to solidify its position as the world leader in level detection by introducing Ultrasonic Level Measurement devices incorporating GAP technology.



Laser Level & Volume Measurement

INDUSTRIES SERVED

PETROCHEMICAL

POWER GENERATION

AGGREGATES

MINING &
CONSTRUCTION

FOOD & BEVERAGE

CHEMICAL PROCESSING

PULP & PAPER
PROCESSING

Going Beyond the Point Where Other Technologies Stop



Sampling of graphic output
from LaserMeter™ 3D

LM80 with 4" tri-clover and heated
optic – food processing/beverage and
pharmaceutical industry

LM80 with heated optic
– water treatment and
chemical industry

Dust tubes are
available in
stainless steel or
aluminum

The SureShot™140XP
comes with an on-board,
all-digital, graphic display

LM80 with 4"
tri-clover quick
disconnect – food
processing and
beverage industry

Hand-held programmer plugs into LM™80
and LM™200 laser transmitters

SureShot™140XP
laser transmitter

LM2D™

LaserMeter™ 2D Laser Scanner:
**Non-Contact Volumetric Measurement of
Belt Conveyed Materials**

- Non-contact belt scale
- Simple installation during conveyor operation
- Non-contact conveyor volume and speed measurement
- Totalizer for real time throughput calculation
- No routine maintenance or calibration
- Integral non-contact belt speed sensor
- Laser pointer for alignment
- Integral dust tubes

LM3D™

LaserMeter™ 3D Laser Scanner:
**Non-Contact Volumetric
Measurement in Silos & Stock Piles**

- 3D Laser surface profiling
- Integral laser pointer for alignment
- Diagonal measuring range: 5 ft (1.5m) to 115 ft (35m)
- Volume & level measurement of any complex shape
- Inventory measured in less than 5 min
- No routine maintenance
- Quick and easy installation

LM80™

Laser Level Transmitter:
**Measures level, distance and position
over extreme environments**

- Long Range to 500 ft. / 150 m (positioning applications) and up to 100 ft. / 30 m (level applications)
- No beam divergence = no false echoes
- Measures any surface at any angle with narrow beam
- Ideal for plastic pellets, grain silos, food processing industry, crushers & rock silos, indoor/outdoor positioning applications- overhead crane, tripper cars
- Built-in purge port (1/8" FNPT)
- Last pulse detection for measurement with light dust
- Rugged and robust enclosure

LM200™

Laser Level Transmitter:
**Distance measuring instrument used
in process control systems**

- Range up to 200 ft / 60 m (level applications) and up to 1312 ft / 400 m (positioning applications)
- No beam divergence = no false echoes
- Measures any surface at any angle
- Rugged and robust enclosure
- Last pulse detection for measurement with light and moderate dust
- Accepts 110/220 VAC and +24VDC input voltages
- Built-in laser pointer

SURESHOT™

Laser Level Transmitter:
**Measures Level and Distance in
Challenging Environments**

- Long Range to 240 ft / 75 m
- No beam divergence = no false echoes
- Measures any surface at any angle
- Explosion-proof dual compartment enclosure
- Built-in laser pointer
- Easy set-up: push buttons or HART protocol
- Local LCD display indication



K-TEK