Flowline is Reliable Liquid and Solids Level Measurement



We Do Your Level Best™

FLOWLINE™
LEVEL BEST

About Flowline

Flowline enables industrial manufacturers, chemical distributors, municipalities, energy, food or data providers to safely and efficiently manage their contained liquid and solid assets. Our quality solutions measure tank or silo inventories, automate processes, ensure workplace safety and protect the environment. We design, manufacture and market the best level measurement and control instruments for your chemical, water, wastewater, oil and dry solid applications. Flowline products are sold and supported worldwide through our stocking distribution partners. Our customers include design engineers, system integrators, original equipment manufacturers, facility operations, engineering and maintenance decision makers. The leading criteria for product selection are reliability, ease of use, availability and quality.



Why Flowline

Reliability

Our advanced sensing technologies including 80-GHz radar, 26-GHz radar, ultrasonic, pressure and guided wave provide accurate and reliable level measurement.

Ease of Use

Our intuitive designs, simple configuration tools, application-solution based website and clear documentation, make our products easy to select, install and configure.

Availability

Our products are locally stocked, fulfilled and supported by our global network of fluid handling, process instrumentation and automation distributor partners.

Quality

Our ISO 9001 company and team of level experts, stand behind our products and services, and your satisfaction is our highest concern. We do your level best.

Markets Served

Chemical Distribution



Industrial Manufacturing



Industrial Water & Wastewater



Bulk Solids Process & Storage



Municipal Water & Wastewater



Data Center Cooling Water & Fuel

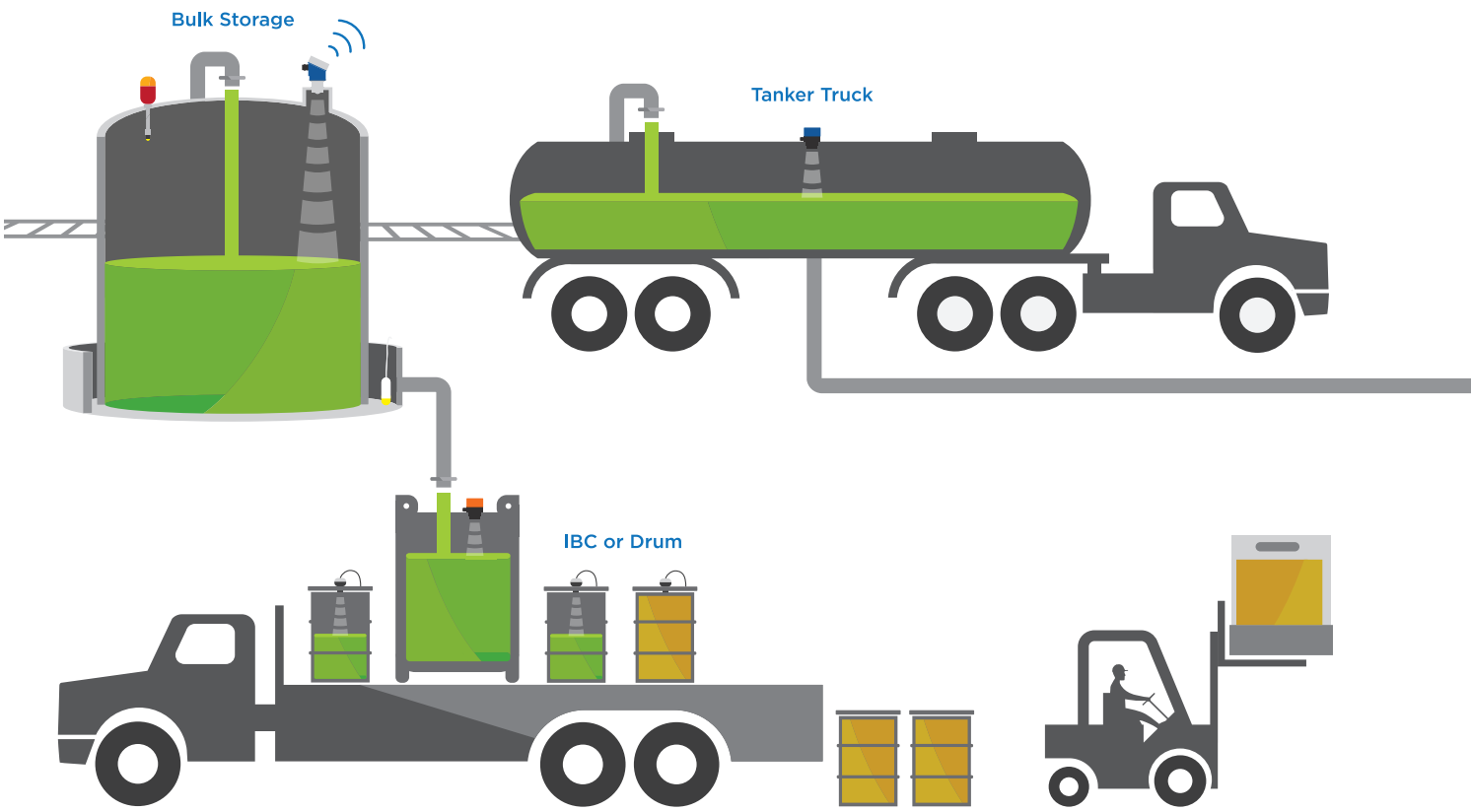




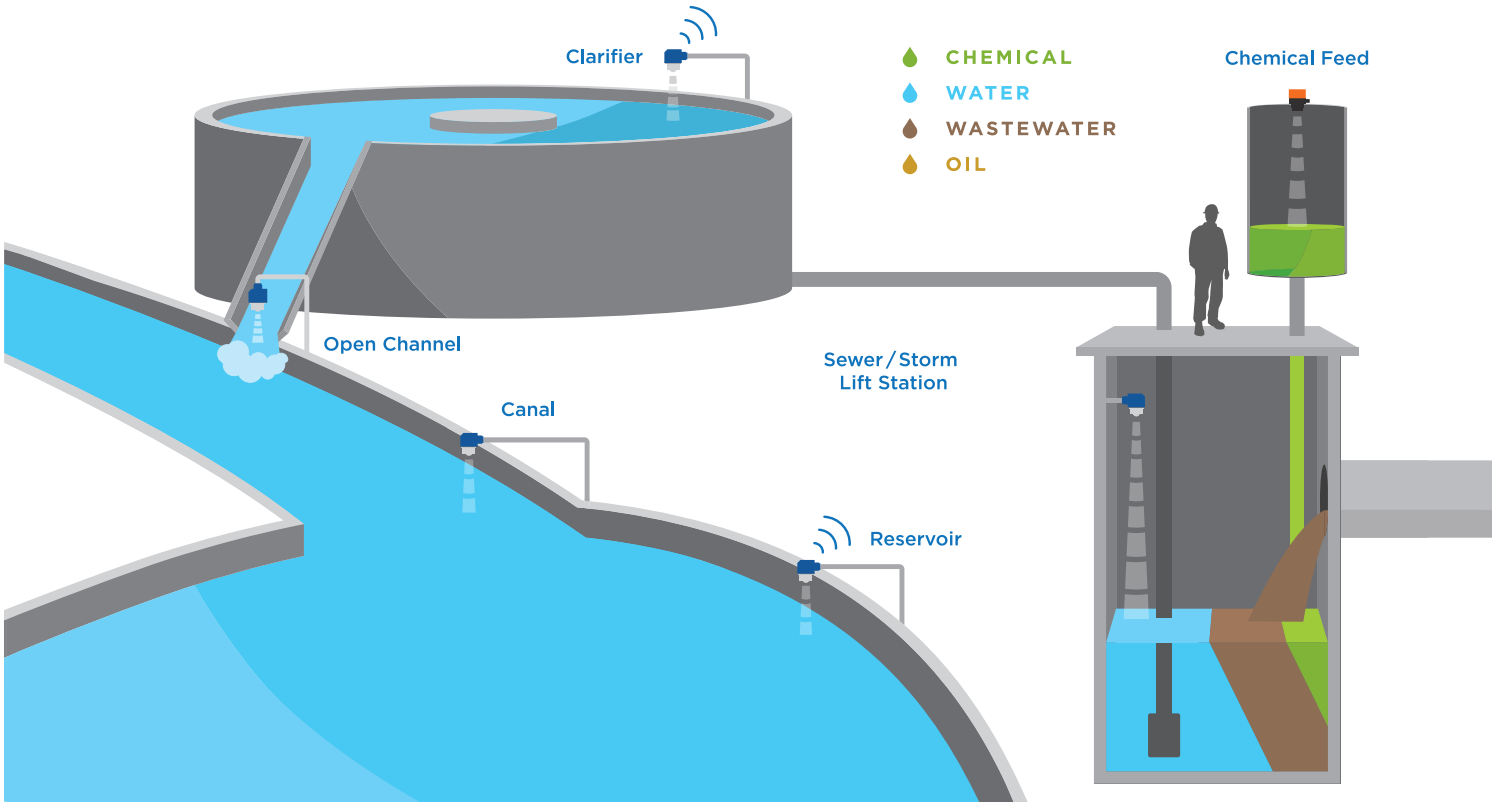
We Do Your Level Best™



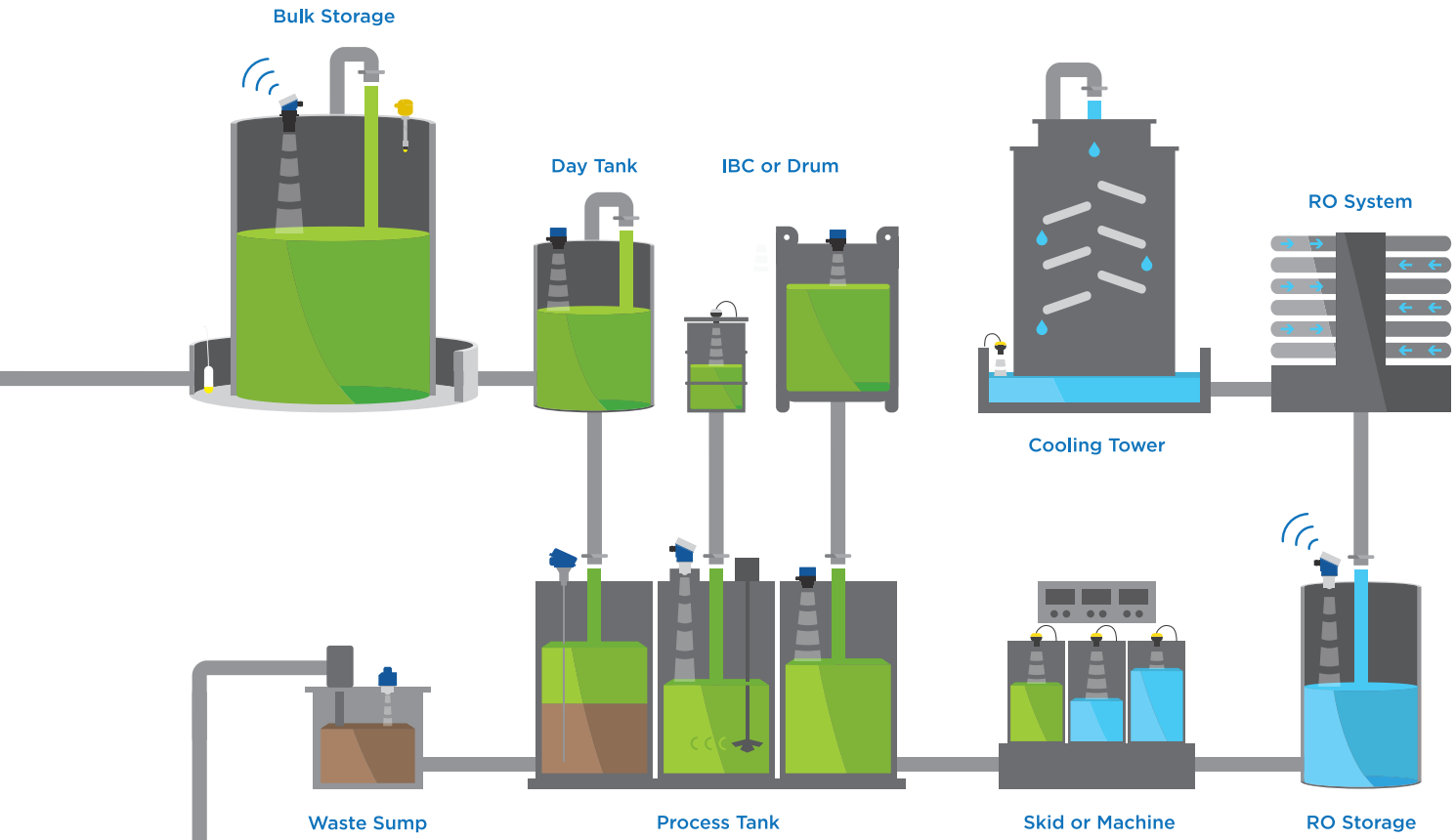
CHEMICAL DISTRIBUTION



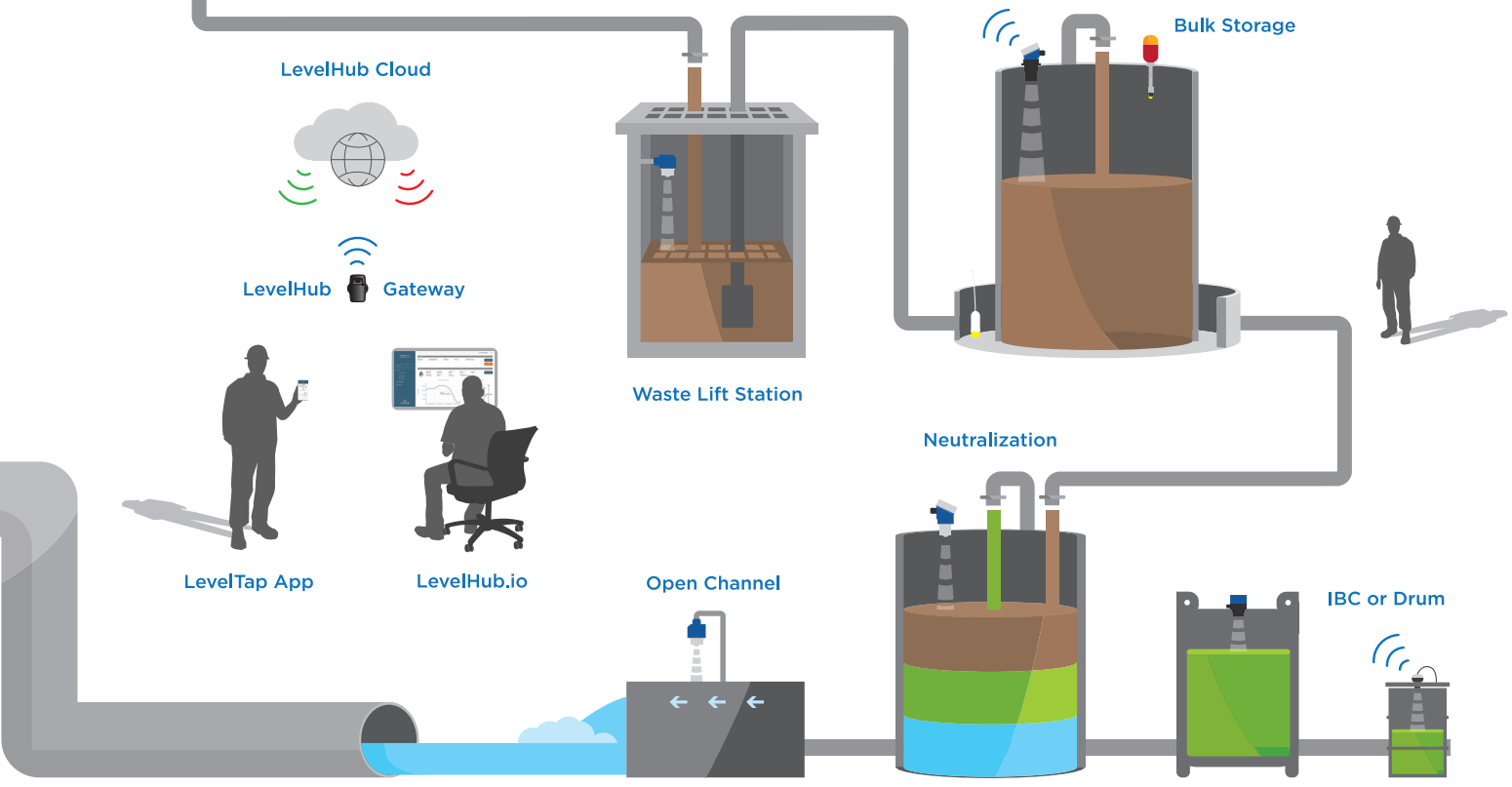
MUNICIPAL WATER & WASTEWATER



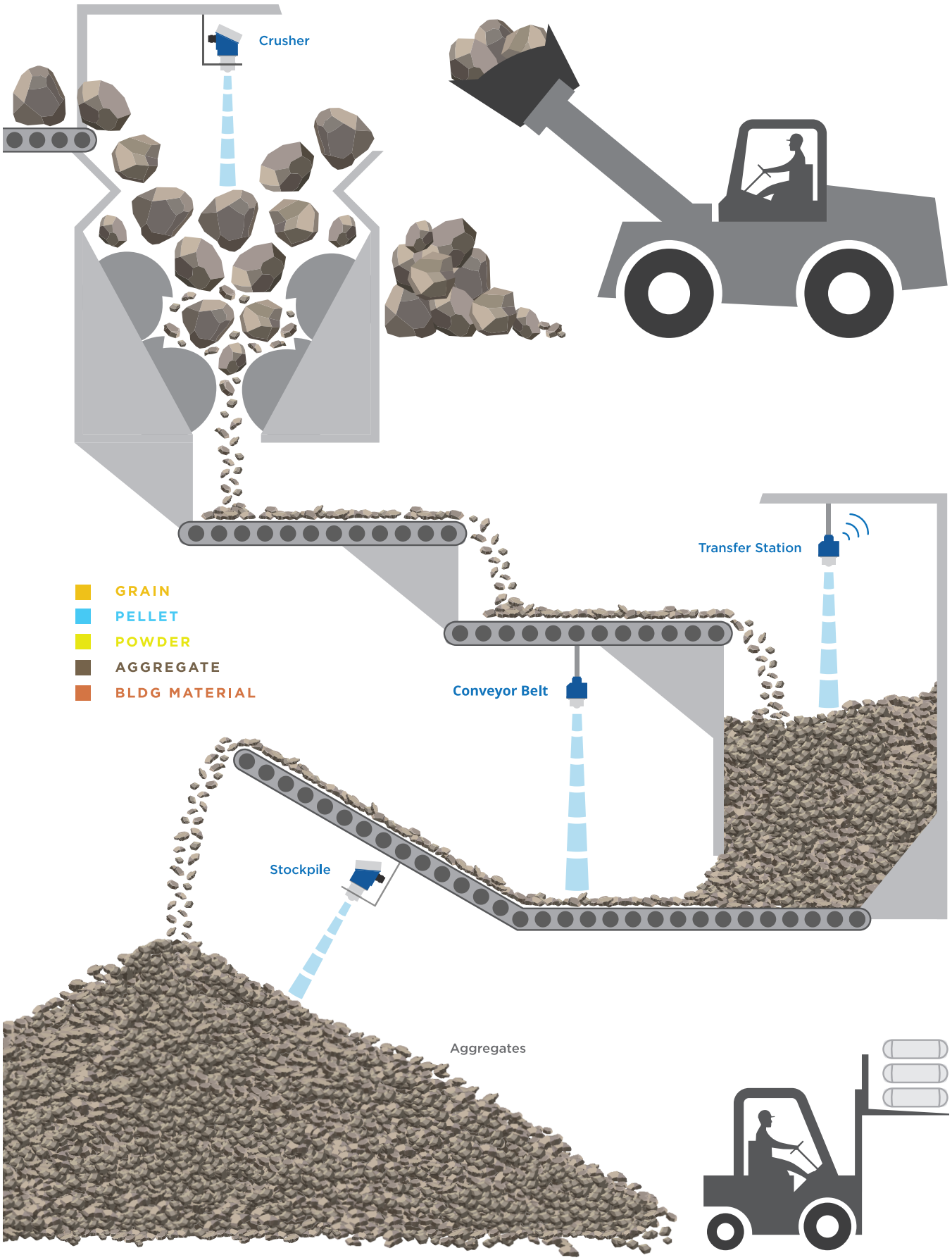
INDUSTRIAL MANUFACTURING



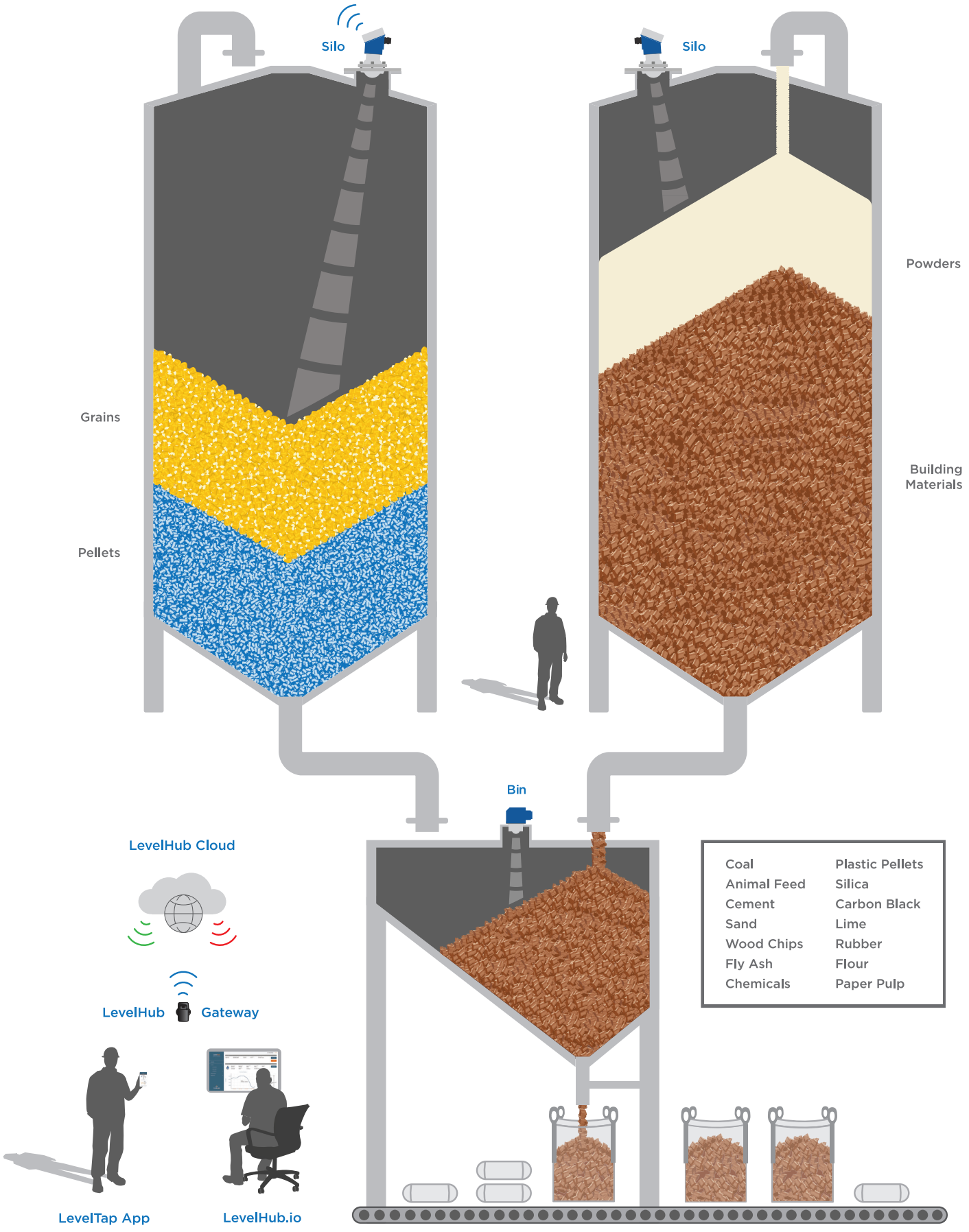
INDUSTRIAL WATER & WASTEWATER



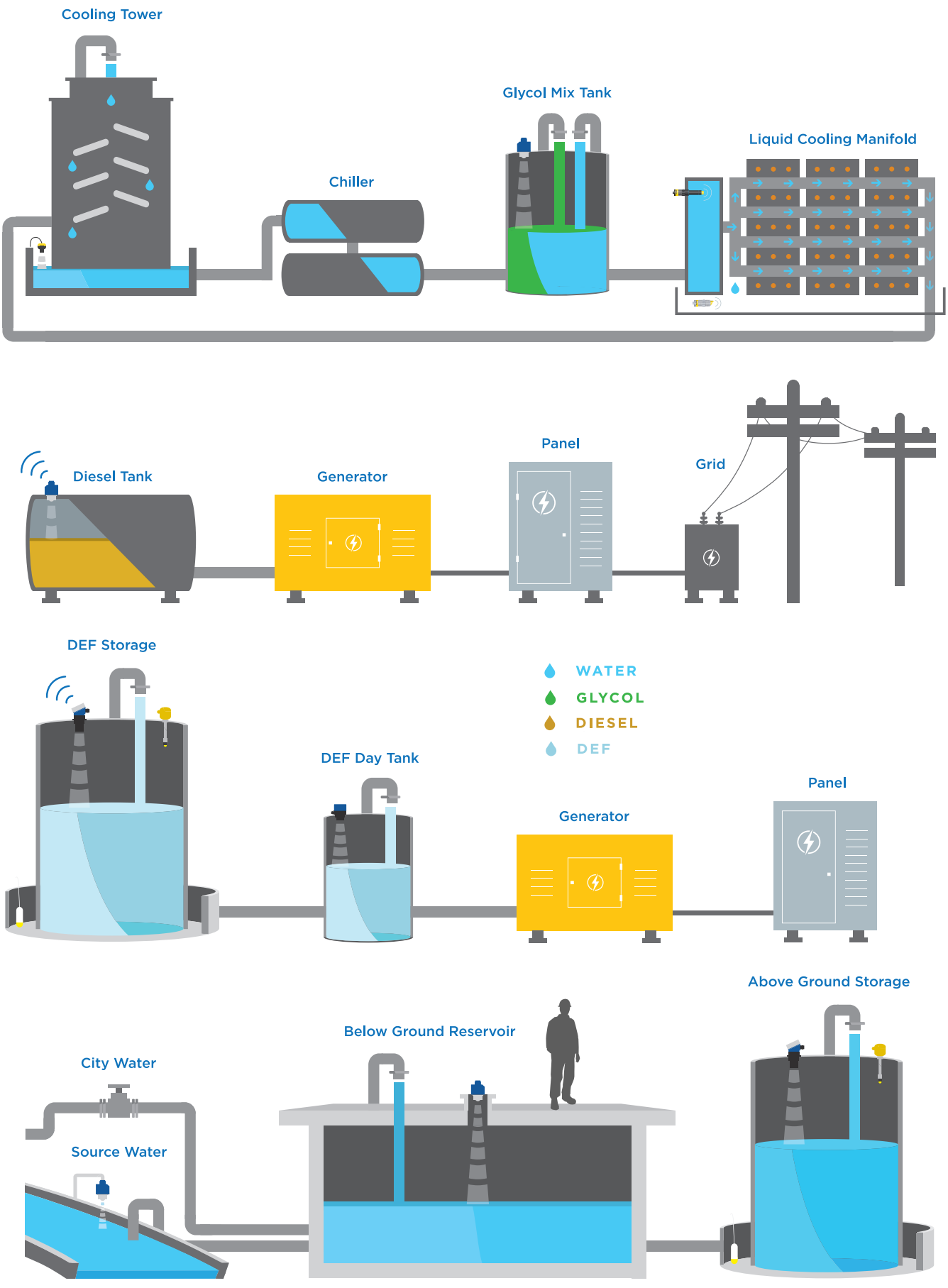
SOLIDS PROCESS



SOLIDS STORAGE



DATA CENTER


Cooling Tower
Chiller
Glycol Mix Tank
Liquid Cooling Manifold
Diesel Tank
Generator
Panel
Grid
DEF Storage
DEF Day Tank
WATER
GLYCOL
DIESEL
DEF
Generator
Panel
Above Ground Storage
Below Ground Reservoir
City Water
Source Water



"Our transition from floats and submersible pressure sensors to Flowline LR80-0000 radar level sensors has reduced maintenance costs, eliminated clogging issues, and improved measurement accuracy in challenging lift station environments.

With hundreds deployed, the LR80's ease of installation, immunity to fouling and proven reliability is a game changer. In a nutshell, EchoBeam is the best all around level sensor we've used."

- I&C Manager

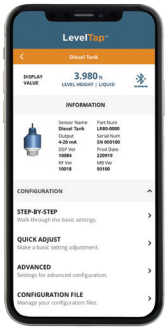
★★★★★

EchoBeam® 80-GHz Radar Liquid and Solids Level Transmitters



EchoBeam is the most reliable and easy-to-use non-contact level sensor. Flow-line's 80-GHz radar technology is unaffected by media, process or environmental factors, and our intuitive LevelTap™ App makes configuration simple.

CONFIGURATION



Download LevelTap at the Apple or Google Play store. Register and go to Demo Sensors to view and interact with sensor configurations. Then BLE connect and manage your sensors from the ground.

TECHNOLOGY

The radar level sensor emits an 80-GHz signal from the base of it's antenna. The FMCW signal travels through the air gap, reflects against the liquid or solids dielectric media and returns to the antenna. The sensor measures the signals time of flight and translates it into level height, distance or volume.

MONITORING

To remotely monitor tanks or silos, package EchoBeam with our LevelHub battery powered wireless gateway.



	LR80	LR81	LR83	LR85
Classification	GP	GP or IS	GP or IS	GP of IS
Media	Liquid or solids	Liquid or solids	Liquid or solids	Solids or liquid
Liquid	Bulk storage, day tank, skid or machine, IBC or drum, process tank, waste sump, neutralization tank, open channel, lift station, clarifier, canal, reservoir	Bulk storage, day tank, skid or machine, IBC or drum, process tank, waste sump, neutralization tank, open channel, lift station, clarifier, canal, reservoir	Bulk storage, process tank, waste sump, neutralization tank, open channel, clarifier, canal, reservoir	Terminal bulk storage, extreme process tank, low dielectric
Solids	Small silo, bin, conveyor, transfer station, stockpile	Medium silo, bin, conveyor, transfer station, stockpile	Medium silo, bin, conveyor, transfer station, stockpile	Tall silo, stockpile, extreme dust, low dielectric
Process	Basic	Challenging	Challenging	Extreme
Range	32.8' (10m) in liquid or 16.4' (5m) in solids	98.4' (30m) in liquid or 49.2' (15m) in solids	98.4' (30m) in liquid or 49.2' (15m) in solids	393.7' (120m) in liquid or 196.8' (60m) in solids
Accuracy	±5mm	±2mm	±2mm	±2mm
Output	4-20 mA	4-20 mA w/HART, Modbus or SDI-12	4-20 mA w/HART or Modbus	4-20 mA w/HART or Modbus
Configuration	LevelTap App	LevelTap App	LevelTap App or push button	LevelTap App or push button
Termination	Cable	Cable	Conduit	Conduit
Conn. orient.	Vertical	Vertical or horizontal	Horizontal	Horizontal
Mount	1 1/2" NPT (G)	1 1/2" NPT (G)	1 1/2" NPT (G)	3" NPT (M80x3) or 3" ANSI (DIN80) gimbal flange
Max. temp.	140° F. (60° C.)	176° F. (80° C.)	212° F. (100° C.)	248° F. (120° C.)
Max. pressure	43.5 PSI (3 bar)	43.5 PSI (3 bar)	43.5 PSI (3 bar)	43.5 PSI (3 bar)
Ant. material	PVDF	PVDF	PVDF	PFA

BEST FOR MOST AMBIENT APPLICATIONS

ECHOBEAM LR80

- GP
- 4-20 mA
- Cable
- 1 1/2” thread

The LR80 general purpose 80-GHz radar level transmitter provides continuous level measurement up to 32.8’ (10m) for liquids or 16.4’ (5m) for solids with a 4-20 mA signal output. The sensor is configured over Bluetooth via LevelTap, is offered with a vertical connector and terminates with a 10m cable.



ECHOBEAM LR81

- GP or IS
- 4-20 mA w/HART, Modbus or SDI-12
- Cable
- 1 1/2” thread

The LR81 general purpose or intrinsically safe 80-GHz radar level transmitter provides continuous level measurement up to 98.4’ (30m) for liquids or 49.2’ (15m) for solids with a 4-20 mA with HART, Modbus or SDI-12 signal output. The sensor is configured over Bluetooth via LevelTap, is offered with a vertical or horizontal connector and terminates with a 10m cable.



ECHOBEAM LR83

- GP or IS
- 4-20 mA w/HART or Modbus
- Conduit
- 1 1/2” thread

The LR83 general purpose or intrinsically safe 80-GHz radar level transmitter provides continuous level measurement up to 98.4’ (30m) for liquids or 49.2’ (15m) for solids with a 4-20 mA with HART or Modbus signal output. The sensor is configured over Bluetooth via LevelTap or it’s push button display, and terminates with a conduit connector.



ECHOBEAM LR85

- GP or IS
- 4-20 mA w/HART or Modbus
- Conduit
- 3” flange or thread

The LR85 general purpose or intrinsically safe 80-GHz radar level transmitter provides continuous level measurement up to 196.8’ (60m) for solids or 393.7’ (120m) for liquids with a 4-20 mA with HART or Modbus signal output. The sensor is configured over Bluetooth via LevelTap or it’s push button display, and terminates with a conduit connector. Options include a 3” rotational flange with air purge for dust or threaded process mount.





EchoPulse® and EchoPro® 26-GHz Radar Liquid or Solids Level Transmitters



EchoPulse and EchoPro provide reliable level measurement of liquid or solids in bulk tank, silo or process applications with higher temperature and pressure, where robust stainless steel construction is required.

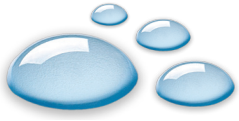
CONFIGURATION

The sensor is easily configured through it's LCD push button display module and intuitive menu or HART protocol. Select from basic or advanced options.



TECHNOLOGY

The radar level sensor emits a 26-GHz signal from the base of it's antenna. The pulsed signal travels through the air gap, reflects against the liquid or solids dielectric media and returns to the antenna. The sensor measures the signals time of flight and translates it into level height or distance.





	LR15 / LR16	LR20 / LR21	LR36	LR41
Classification	GP / IS	GP / IS	IS	IS
Media	Liquid	Liquid	Solids	Solids
Application	Storage and process with elevated temp & pressure	Storage and process with corrosive media	Silos and process with high temp & pressure	Silos and process with high temp
Process	Basic	Challenging	Challenging	Extreme
Range	98.4' (30m)	65.6' (20m)	49.2' (15m)	229.7' (70m)
Accuracy	±3mm	±3mm	±10mm	±15mm
Output	4-20 mA / 4-20 mA w/HART	4-20 mA / 4-20 mA w/HART	4-20 mA w/HART	4-20 mA w/HART
Mount	1 1/2" NPT	3" or 4" ANSI	1 1/2" NPT or 4" ANSI	1 1/2" NPT or 4" ANSI
Max. temp.	302° F. (150° C.)	302° F. (150° C.)	392° F. (200° C.)	752° F. (400° C.)
Max. pressure	150 PSI (10 bar)	72 PSI (5 bar)	580 PSI (40 bar)	Atmospheric (ANSI)
Ant. material	316L	316L w/PTFE shield	316L	316L

ECHOPULSE LR15
ECHOPRO LR16

- GP / IS
- 4-20 mA
- 316L
- 1 1/2" thread

The LR15 general purpose and LR16 intrinsically safe 26-GHz radar level transmitters provide continuous level measurement of liquids up to 98.4' (30m) with a 4-20 mA signal output. The sensors are well suited for basic storage and process applications with elevated temperature or pressure, and mildly corrosive media.











ECHOPULSE LR20
ECHOPRO LR21

- GP / IS
- 4-20 mA
- 316L & PTFE
- 3” or 4” ANSI

The LR20 general purpose and LR21 intrinsically safe 26-GHz radar level transmitters provide continuous level measurement of liquids up to 65.6’ (20m) with a 4-20 mA signal output. The sensors are well suited for challenging storage and process applications with elevated temperature, ambient pressure, and corrosive media with it’s PTFE antenna shield.

ECHOPRO LR36

- IS
- 4-20 mA
- 316L
- 1 1/2” thread or 4” ANSI

The LR36 intrinsically safe 26-GHz radar level transmitter provides continuous level measurement of solids up to 49.2’ (15m) with a 4-20 mA signal output. The sensor is well suited for challenging silo and process applications with high temperature or pressure, and mildly corrosive media.

ECHOPRO LR41

- IS
- 4-20 mA
- 316L
- 1 1/2” thread or 4” ANSI

The LR41 intrinsically safe 26-GHz radar level transmitter provides continuous level measurement of solids or 229.7’ (70m) with a 4-20 mA signal output. The sensor is well suited for extreme silo and process applications with high temperature or pressure in the threaded version, and mildly corrosive media.





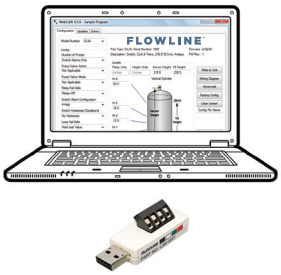
EchoWave® Guided Wave 1.5 GHz Radar Liquid Level Transmitters



EchoWave provides reliable level measurement of liquid in small tank applications with higher temperature or pressure, and in challenging process or media characteristics such as foam or coating.

CONFIGURATION

The sensor is easily setup with our free WebCal™ PC utility program that enables you to power and configure sensors via our Fob USB adapter. Sensors are sold with or without Fobs.



TECHNOLOGY

The radar level sensor emits a 1.5 GHz signal through it's antenna feed through. The signal travels down the coaxial or rod antenna wave guide, reflects against the liquid dielectric media and returns to the feed through. The sensor measures the signals time of flight and translates it into level height or distance.

	LG10-0	LG10 -1
Classification	GP	GP
Media	Liquid	Liquid
Application	Process tank or skid with elevated temp & pressure or foam & coating	Process tank or skid with elevated temp & pressure or foam
Process	Challenging	Challenging
Range	9.8' (3m)	9.8' (3m)
Accuracy	±3mm	±3mm
Output	4-20 mA	4-20 mA
Mount	3/4" NPT	3/4" NPT
Max. temp.	302° F. (150° C.)	302° F. (150° C.)
Max. pressure	250 PSI (17 bar)	250 PSI (17 bar)
Ant. material	316L & Peek	316L & Peek

ECHOWAVE LG10

- GP
- 4-20 mA
- 316L
- 3/4" thread

The general purpose LG10-0 rod and LG10-1 coaxial guided wave radar level transmitter provides continuous level measurement of liquids up to 9.8' (3m) with a 4-20 mA signal output. The sensor is well suited for process tanks or skids with elevated temperature or pressure, and mildly corrosive media. Both antenna types work well in foam. Select the rod antenna for coating or dirty media. Select the coaxial antenna for all other media types.



BEST FOR SMALL TANK HIGH TEMP OR PRESSURE

“We blend, package, and deliver sanitizing chemicals to food and beverage customers. We also reclaim, clean and recycle tanks. In both our production and cleaning processes, I’ve evaluated many level sensors. But I’d yet to find one that performs reliably across production with foaming, coating or mildly corrosive chemicals, and in cleaning with steam, spray and pressure.

After a brief call to Flowline application engineering, the LG10 was identified as the best sensor for us. That was seven years ago, and they were right. If you have application questions, give them a call. They’re professional level experts.”

- Maintenance Manager

★★★★★



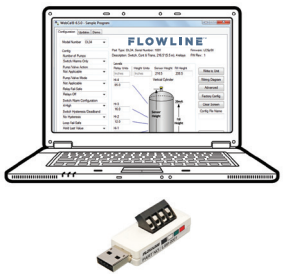
EchoPod® and EchoTouch® Ultrasonic Liquid Level Transmitters



EchoPod and EchoTouch provide reliable level measurement of liquid in ambient small to medium tank applications with no foam or strong vapor, and easy to basic process conditions.

CONFIGURATION

The sensor is easily setup with our free WebCal™ PC utility program that enables you to power and configure sensors via our Fob USB adapter. Sensors are sold with or without Fobs.



TECHNOLOGY

The ultrasonic level sensor emits a 50-100 KHz signal from its transducer. The acoustic signal travels through the air gap, reflects against the liquid and returns to the transducer. The sensor measures the signals time of flight and translates it into level height or distance.

	DL10 / DX10	DL14 / DL24	UG01-03 / US01-03	UG06 / US06
Classification	GP	GP	GP / IS	GP / IS
Media	Liquid	Liquid	Liquid	Liquid
Application	Chem-feed, skid, machine, IBC or drum	Day tank, chem-feed, skid, machine, IBC or drum	Day tank, chem-feed, skid, machine, small sump	Bulk storage, day tank, neutralization tank
Process	Easy	Easy	Basic	Basic
Condensation	Minimal	Minimal	Yes	Yes
Range	49.2' (1.25m)	49.2' (1.25m) / 9.8' (3m)	4.9' (1.5m) or 9.8' (3m)	19.6' (6m)
Accuracy	±3mm	±3mm	±3mm	±0.2% of range
Output	4-20 mA / 0-10 VDC or 976-2000 Hz	4-20 mA + (4) relays	4-20 mA + (4) relays / 4-20 mA	4-20 mA
Display	No	No	No	Yes
Configuration	WebCal	WebCal	WebCal	Push button, WebCal
Termination	Cable	Cable	Cable	Conduit
Mount	1" NPT (G)	1" NPT (G)	2" NPT (G)	2" NPT (G)
Max. temp.	140° F. (60° C.)	140° F. (60° C.)	176° F. (80° C.)	176° F. (80° C.)
Max. pressure	30 PSI (2 bar)	30 PSI (2 bar)	30 PSI (2 bar)	30 PSI (2 bar)
Trans. type	Horizontal	Horizontal	Reflective	Reflective
Trans. material	PVDF	PVDF	PVDF	PVDF

ECHOPOD DL10/DX10

- GP
- 4-20 mA / 0-10 VDC
- PVDF
- 1" thread

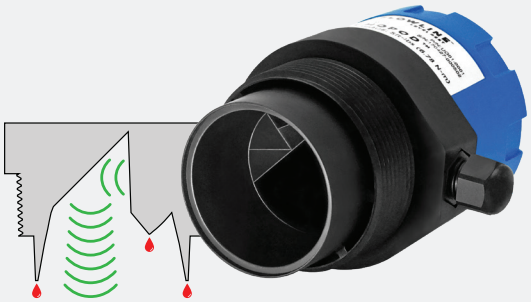
The DL10 and DX10 general purpose ultrasonic level transmitters provide continuous level measurement of liquids up to 49.2" (1.25m). The DL10 has a 4-20 mA output and the DX10 has a selectable 0-5 VDC, 0-10 VDC or frequency output. The sensors are well suited for ambient small tank applications with no foam, minimal vapor and easy process conditions.



BEST FOR SMALL TANK AMBIENT WITH NO FOAM

REFLECTIVE

Condensation can attenuate and degrade the reliability of ultrasonic level sensors with horizontal transducers. Flowline's patented reflective ultrasonic design uses gravity to naturally shed condensation from its vertically oriented transducer, maintaining reliable measurement even in highly condensing environments.



ECHOPOD DL14/DL24

- GP
- 4-20 mA + relays
- PVDF
- 1" thread

The DL14 and DL24 general purpose ultrasonic level transmitters provide continuous level measurement of liquids up to 9.8' (3m) with a 4-20 mA signal output and four relays. The sensors are well suited for small tank applications with no foam, minimal vapor and easy process conditions.



ECHOPOD UG01-03
ECHOTOUCH US01-03

- GP / IS
- 4-20 mA
- PVDF
- 2" thread

The UG01-03 general purpose and US01-03 intrinsically safe reflective ultrasonic level transmitters provide continuous level measurement of liquids up to 9.8' (3m) with a 4-20 mA signal output. The UG01-03 also has four relays. The sensors are well suited for ambient small tank applications with no foam, minimal vapor and basic process conditions.



ECHOPOD UG06
ECHOTOUCH US06

- GP / IS
- 4-20 mA
- PVDF
- 2" thread

The UG06 general purpose and US06 intrinsically safe reflective ultrasonic level transmitters provide continuous level measurement of liquids up to 19.6' (6m) with a 4-20 mA signal output. The sensors are well suited for ambient medium sized tank applications with no foam and basic process conditions.





DeltaSpan® Submersible and External Mount Liquid Level Transmitters



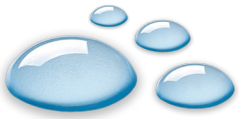
DeltaSpan provides reliable level measurement of liquid in tank, sump, reservoir or well applications, and is offered in flexible types for submersible or external mounting, corrosion-resistance, and level plus temperature.

TECHNOLOGY

The pressure level sensor measures liquid height by detecting the hydrostatic pressure or liquid weight exerted against its diaphragm sensing element. As the level rises, the pressure increases, and as the level falls, the pressure decreases. The sensor measures the diaphragm deformation and translates it into level height.

SUBMERSIBLE	LD31	LD32	LD33	LD36
Classification	GP	GP	GP	GP
Media	Liquid	Liquid	Liquid	Liquid
Application	Water, diluted chemical	Wastewater lift station	Corrosive chemical	Level + temperature
Range	34.65' (10.6m)	34.65' (10.6m)	34.65' (10.6m)	34.65' (10.6m)
Accuracy	±0.25% of range	±0.25% of range	±0.25% of range	±0.25% of range
Output	4-20 mA	4-20 mA	4-20 mA	Dual 4-20 mA
Configuration	None, fixed span	None, fixed span	None, fixed span	None, fixed span
Termination	Cable	Cable	Cable	Cable
Enclosure	NEMA 6P (IP68)	NEMA 6P (IP68)	NEMA 6P (IP68)	NEMA 6P (IP68)
Max. temp.	176° F. (80° C.)	176° F. (80° C.)	176° F. (80° C.)	176° F. (80° C.)
Wetted matl.	316, Buna-N, PVC, PUR	316, PUR	PTFE, FEP	316, PUR

EXTERNAL	LD30	LD37
Classification	GP	GP
Media	Liquid	Liquid
Application	Water, diluted chemical	Corrosive chemical
Range	34.65' (10.6m)	11.55' (3.5m)
Accuracy	±0.25% of range	±0.25% of range
Output	4-20 mA	4-20 mA
Configuration	None, fixed span	None, fixed span
Termination	Connector or cable	Connector or cable
Enclosure	NEMA 4X (IP65)	NEMA 4X (IP65)
Mount	1/4" NPT	1/4" NPT
Max. temp.	176° F. (80° C.)	176° F. (80° C.)
Wetted matl.	316	PTFE



BEST FOR DOWN HOLE OR THICK SURFACE FOAM

ACCESSORIES

For easy mounting and wiring termination, package your sensors with our installation accessories including connectors, cables, hangers or PP junction boxes with terminal strips and PP or PVDF plug fittings.







DELTASPAN LD31

- GP
- 4-20 mA
- 316, BUNA-N, PVC & PUR
- Cable

The submersible LD31 general purpose pressure level transmitter provides continuous level measurement up to 34.65' (10.5m) of water column with a 4-20 mA signal output. Offered in three ranges, the sensor is well suited for clean liquids compatible with 316, BUNA-N, PVC and PUR.

DELTASPAN LD32

- GP
- 4-20 mA
- 316 & PUR
- Cable

The submersible LD32 general purpose pressure level transmitter provides continuous level measurement up to 34.65' (10.5m) of water column with a 4-20 mA signal output. Offered in three ranges, the sensor is well suited for dirty liquids compatible with 316 and PUR. The clog resistant diaphragm and heavy duty shield make it a great choice for turbulent sewer, storm or wastewater lift stations.



DELTASPAN LD33

- GP
- 4-20 mA
- PTFE & FEP
- Cable

The submersible LD33 general purpose pressure level transmitter provides continuous level measurement up to 34.65' (10.5m) of water column with a 4-20 mA signal output. Offered in three ranges, the sensor is well suited for corrosive liquids compatible with PTFE and FEP, and provides a corrosion-resistant alternative to radar and ultrasonic.



DELTASPAN LD36

- GP
- 4-20 mA
- 316 & PUR
- Cable

The submersible LD36 dual purpose level and temperature pressure transmitter provides continuous liquid level measurement up to 34.65' (10.5m) of water column and temperature measurement from -40° to 257° F. (-40° to 125° C.) with a dual 4-20 mA signal output. The sensor is well suited for clean liquids compatible with 316 and PUR.



DELTASPAN LD30

- GP
- 4-20 mA
- 316
- Connector or cable
- 1/4" thread

The external mount LD30 general purpose pressure level transmitter provides continuous level measurement up to 34.65' (10.5m) of water column with a 4-20 mA signal output. Offered in two ranges, the sensor is well suited for clean liquids compatible with 316.



DELTASPAN LD37

- GP
- 4-20 mA
- PTFE
- Connector or cable
- 1/4" thread

The external mount LD37 general purpose pressure level transmitter provides continuous level measurement up to 11.55' (0 to 3.4m) of water column with a 4-20 mA signal output. Offered in one range, the sensor is well suited for corrosive liquids compatible with PTFE.



Switch-Tek® Corrosion-Resistant Liquid Level and Leak Detection Switches



Offered in Smart Trak or Switch-Pak assemblies with fittings, junction boxes or controllers, and as individual sensors, these corrosion-resistant switches provide reliable level or leak detection of water, chemical, wastewater and light oil.

ASSEMBLIES	AXXX	AX23	AX1X	AX13
Classification	GP	GP	GP	GP
Type	Multi-point switch	Fill or empty control	High or low switch	High or low shut off
Application	Day tank, skid or machine, waste sump	Day tank, skid or machine, waste sump	Bulk storage, day tank, IBC or drum	Bulk storage, day tank, IBC or drum
Max. length	10' (3m)	10' (3m)	10' (3m)	10' (3m)
Supply	12-36 VDC	120 / 240 VAC	12-36 VDC	120 / 240 VAC
Contact	(1-4) SPST relays or SPDT reed	(1) SPDT latching relay	(1) SPST relay or SPDT reed	(1) SPDT relay
Rating	60 VA or 15 VA	250 VAC @ 16A	60 VA or 15 VA	250 VAC @ 16A
Enclosure	NEMA 4X (IP65)	NEMA 4X (IP65)	NEMA 4X (IP65)	NEMA 4X (IP65)
Mount	2" NPT (G)	2" NPT (G)	2" NPT (1 1/2" G)	2" NPT (1 1/2" G)
Max. temp.	176° F. (80° C.)	176° F. (80° C.)	176° F. (80° C.)	176° F. (80° C.)
Max pressure	Atmospheric	Atmospheric	150 PSI (10 bar)	150 PSI (10 bar)
Wetted matl.	PP	PP	PP or PVDF	PP or PVDF

SENSORS	LU10	LZ12	LP15	LV10	LO10
Classification	GP	GP	GP	GP	GP
Type	Ultrasonic switch	Vibration switch	Capacitance switch	Buoyancy switch	Optic leak switch
Application	Chemical, solvent, light oil	Wastewater	Water, conductive chemical	Clean water, chemical	Water, translucent chemical
Installation	Universal	Universal	Universal	Top wall	Universal
Supply	12-32 VDC	12-36 VDC	12-36 VDC	- - -	12-36 VDC
Contact	(1) SPST relay (NO / NC)	(1) SPST relay (NO / NC)	(1) SPST relay (NO / NC)	(1) SPDT reed (NO / NC)	(1) SPST relay (NO / NC)
Rating	32 VDC (0.5A)	60 VA (1A)	60 VA (1A)	15 VA (0.25A)	60 VA (1A)
Enclosure	NEMA 6 (IP68)	NEMA 6 (IP68)	NEMA 6 (IP68)	NEMA 6 (IP68)	NEMA 6 (IP68)
Mount	3/4" NPT (G)	3/4" NPT (G)	3/4" NPT (G)	3/4" NPT (G)	3/4" NPT (G)
Max. temp.	176° F. (80° C.)	176° F. (80° C.)	176° F. (80° C.)	176° F. (80° C.)	176° F. (80° C.)
Max pressure	150 PSI (10 bar)	150 PSI (10 bar)	150 PSI (10 bar)	25 PSI (1.7 bar)	150 PSI (10 bar)
Wetted matl.	PP or PFA	PP-Ryton	PP	PP or PVDF	PP or PFA

BEST FOR WATER, CHEMICAL, WASTE AND OIL

SMART TRAK AXXX
- GP
- 12-36 VDC
- 1-4 relays (60VA)
- PP, adjustable

The general purpose level switch package provides 1-4 adjustable switch points with 60VA relays and a junction box for wiring termination. Offered in three sensor technologies, choose the type based upon your application liquid. The assembly is constructed of PP.



SMART TRAK AX23
- GP
- 120 / 240 VAC
- 1 latching relay (16A)
- PP, adjustable

The general purpose level switch package provides automatic filling or emptying between two adjustable switch points with latching 16A relay control. Offered in three sensor technologies, choose the type based upon your application liquid. The assembly is constructed of PP.



SWITCH-PAK AX1X
- GP
- 12-36 VDC
- 1 relay (60VA)
- PP or PVDF

The general purpose level switch package provides high or low level detection with a 60VA relay and junction box for wiring termination. Offered in three sensor technologies, choose the type based upon your application liquid. The assembly is constructed of PP or PVDF.



SWITCH-PAK AX13
- GP
- 120 / 240 VAC
- 1 relay (16A)
- PP or PVDF

The general purpose level switch package provides high or low level shut off with 16A relay control. Offered in three sensor technologies, choose the type based upon your application liquid. The assembly is constructed of PP or PVDF. An optional flash alarm can be added to the controller.



ULTRASONIC LU10
- GP
- 12-36 VDC
- 1 relay (60VA)
- PP or PFA

The general purpose ultrasonic level switch reliably detects chemical, solvent and light weight oil with a 60VA relay. Offered in short and long types, the PP or PFA sensor is mounted through the wall or inside the tank on Smart Trak or Switch-Pak.



VIBRATION LZ12
- GP
- 12-36 VDC
- 1 relay (60VA)
- Ryton

The general purpose vibration level switch reliably detects light to medium coating or scaling liquids such as wastewater with a 60VA relay. The Ryton sensor is mounted through the wall or inside the tank on Smart Trak or Switch-Pak. A proactive maintenance alarm requests cleaning.



CAPACITANCE LP15
- GP
- 12-36 VDC
- 1 relay (60VA)
- PP

The general purpose capacitance level switch reliably detects water and water based chemical with a 60VA relay. The PP sensor is mounted through the wall or inside the tank on Switch-Pak, and is widely used in HVAC and data center cooling water applications.



BUOYANCY LV10
- GP
- 12-36 VDC
- 1 reed (15VA)
- PP or PVDF

The general purpose buoyancy level switch reliably detects clean water and water like chemical solution with a 15VA reed switch. The PP or PVDF sensor is mounted inside the tank on Smart Trak or Switch-Pak, and features a baffle body with stabilized float to dampen switch chatter.

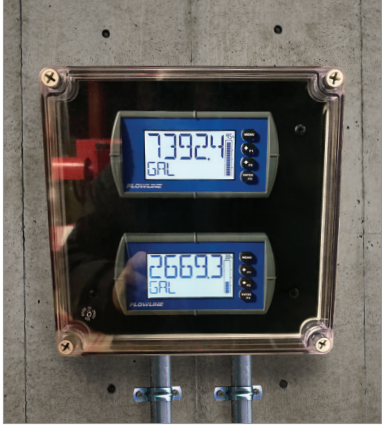


OPTIC LO10
- GP
- 12-36 VDC
- 1 relay (60VA)
- PP or PFA

The general purpose optic leak switch reliably detects water and translucent chemical with a 60VA relay. Offered in short and long types, the PP or PFA sensor is mounted in the interstitial space of a dual wall tank or piping system, or within a secondary containment sump.



Controllers and Displays for Level Transmitters and Level Switches



Offered in panel mount, rail mount and sensor mount types, these controllers and displays provide reliable automation, indication and safety functions with our level transmitters and level switches.

FOR TRANSMITTERS	LI55	LC52	LI23 / LI24
Classification	GP	GP	GP / IS
Type	Controller	Controller	Indicator
Application	Display + control	Display + control	Display + alarms
Mount	Panel mount	Rail mount	Panel mount
Display	6-digit LED	3.5-digit LED	5-digit LCD
Supply	85-265 VAC or 12-24 VDC	120 / 240 VAC	12-30 VDC loop powered
Contact	(0, 2, 4) SPDT relays	(2) SPDT relays	(0, 2) SPST relays
Rating	3A @ 30 VDC, 250 VAC resistive	10A @ 250 VAC	1A @ 250 VAC
Sensor supply	24 VDC	24 VDC	- - -
Repeater	4-20 mA, 24 VDC	4-20 mA, 12-36 VDC	4-20 mA, 7-30 VDC
Enclosure	1/8 DIN, NEMA 4X	DIN rail, NEMA 1	1/8 DIN, NEMA 4X

FOR SWITCHES	LC4X	LC10 / LC11	LC0X
Classification	GP	GP	GP
Type	Controller	Controller	Junction box
Application	Auto fill or empty w/alarm or high and/or low alarm	High or low alarm / Auto fill or empty	Wiring termination
Mount	Rail mount	Switch-Pak or sensor / Smart Trak	Switch-Pak, Smart Trak or sensor
Strobe Alert	- - -	Option	- - -
Input	(1-3) switches	(1) switch / (2) switches	(1-4) switches
Indication	LED status	LED status	- - -
Supply	120 / 240 VAC	120 / 240 VAC	- - -
Contact	(1-2) SPDT relays	(1) SPDT relay	- - -
Rating	10A @ 250 VAC	16A @ 250 VAC	- - -
Sensor supply	13.5 VDC	13.5 VDC	- - -
Enclosure	NEMA 1	NEMA 4X	NEMA 4X

BEST FOR AUTOMATION, INDICATION AND SAFETY

DATAVIEW LI55
- GP
- 85-265 VAC
- 0-4 relays (3A)
- 4-20 mA repeater

The LI55 general purpose tank or silo level controller displays engineering units with one 4-20 mA level transmitter, and is offered in three configurations with optional two or four programmable relays, an isolated 4-20 mA repeater and volumetric linearization.



DATAPOINT LC52
- GP
- 120 / 240 VAC
- 2 relays (10A)
- 4-20 mA repeater

The LC52 general purpose AC powered tank or silo level controller displays engineering units with one 4-20 mA level transmitter, two programmable relays and an isolated 4-20 mA repeater. It's also compatible with two or three-wire transmitters like EchoWave.



DATALOOP LI23/LI24
- GP / IS
- 12-30 VDC loop
- 0-2 relays (1A)
- 4-20 mA repeater

The LI23 general purpose and LI24 intrinsically safe loop powered tank or silo level indicator displays engineering units connected in series with one level transmitter, and is offered with two optional relays and an isolated 4-20 mA repeater.



SWITCH-PRO LC4X
- GP
- 120 / 240 VAC
- 1-2 relays (10A)
- 1-3 switch inputs

The LC4X general purpose level switch controllers are offered in three configurations for pump, valve or alarm control with one to three switch inputs and one to two relays. Each has LED status, adjustable time delays and relay invert switches.



SWITCH-PRO LC10/LC11
- GP
- 120 / 240 VAC
- 1 relay (16A)
- 1-2 switch inputs

The LC10 and LC11 general purpose level switch controllers mount on Smart Trak, Switch-Pak or a sensor. The LC10 has one switch input with one relay for high or low level shut off. The LC11 has two switch inputs and one latching relay for tank automatic filling or emptying.



SWITCH-PRO LC0X
- GP
- 1/2" conduit
- 6-pole or 12-pole
- 1-4 switch inputs

The LC0X general purpose level switch junction boxes mount on Smart Trak, Switch-Pak or a sensor for wiring termination, and are offered in two sizes. The LC05 supports up to four switches and the LC06 supports up to two switches.





LevelHub® Remote Level Monitoring

The HB01 wireless battery-powered gateway enables you to easily record, transmit, and view tank or silo data from a phone or browser, and send real-time alerts for high or low levels to stakeholders. The gateway periodically wakes to collect data via Bluetooth from up to four EchoBeam radar level sensors. Data is transmitted over the T-Mobile LTE-M network in the US and Canada or Vodafone in the EU and UK to Flowline's secure AWS cloud server, where it can be accessed through the LevelTap App or the levelhub.io website. Configuration is easy via the App or website, and allows you to grant view-only access to team members, set scan and transmission intervals, and enable SMS, email or alert notifications. Data is exportable in CSV, JSON or API formats.



- Transmits level, location, alerts and battery status
- Robust lithium battery lasts up to 8 years in service
- Easy to install, configure and run within 15 minutes





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Vol 17 rev 1 | $3.00