

# LineVu

# DATASHEET



Live Stream Video  
From Inside Your Pipeline





## At a Glance

LineVu provides pipeline visibility with its live, high-resolution, color video streaming camera. LineVu enables proactive monitoring of NGL and Glycol carryover to boost revenue for processing plants and minimize maintenance costs for transmission system operators.

## A WINDOW INTO YOUR PROCESS

The LineVu process camera system proactively monitors for liquid carryover, black powder and other contamination. These have significant financial, safety and compliance impacts for gas system operators. The presence of wet gas has a significant impact on fiscal measurements of calorific value and flow. LineVu has revealed liquid carryover occurs far more frequently than expected. This means that gas processors are losing out on revenue, and gas transmission companies have higher compressor servicing and pigging costs than necessary.



## TURNING VIDEO INTO USEFUL DATA

LineVu's cutting-edge high resolution, full-color video camera is a game-changer for pipeline monitoring, revolutionizing real-time surveillance and analysis. Harnessing the power of advanced image processing, LineVu detects and responds to contamination events, triggering immediate alarms. This system offers a live video feed to local control desks, while simultaneously delivering time-lapse videos and in-depth analysis to remote service and process management engineers through a secure web portal. With LineVu's data at your fingertips, process decisions become clearer, whether optimizing filter replacement and maintenance schedules, or enhancing phase separation efficiency. Furthermore, LineVu effortlessly presents mist levels and stratified flow data in user-friendly formats, facilitating rapid fault diagnosis. Not just monitoring; LineVu is a revolution in gas quality measurement.

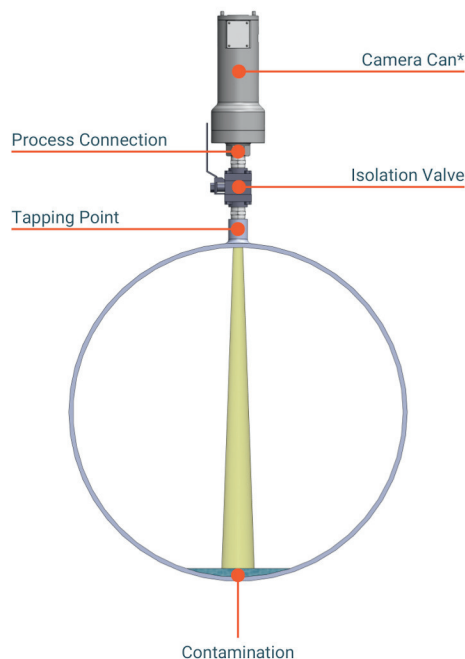


# CONNECTION OPTIONS

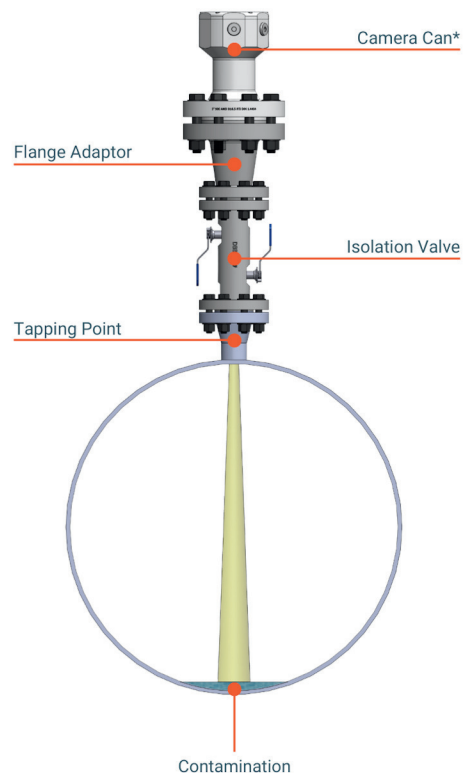
## Threaded and Flanged Connections

Different LineVu configurations can be installed depending on the type of tapping point available. Both threaded (1" NPT) and flanged (3" #900 RTJ) connections are available as standard. Alternative process flange connections can be facilitated with the use of a flange adaptor.

### Threaded Process Connection

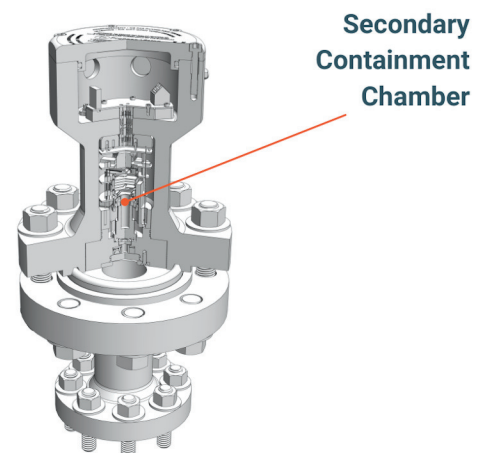


### Flanged Process Connection



## SECONDARY CONTAINMENT

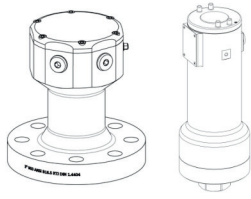
Each LineVu Camera Can has an upper and lower chamber. The lower chamber is a patented secondary containment chamber, able to contain full line pressure and gives the system an added layer of safety when connecting to a natural gas pipeline.



\*A brace can be added to reduce stress on small bore connections, please ask for details

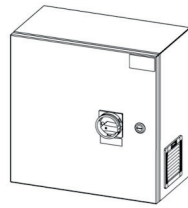


# PRODUCT RANGE



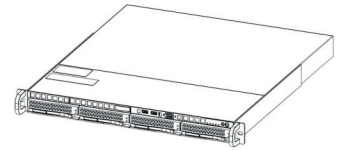
## Camera Can

Mounted to the pipeline, the camera can capture 24/7 video of the pipeline activity. Available in threaded and flanged process connections.



## Interface Unit

Located in a safe area, the interface unit, provides power to the Camera Can, as well as connection to the LineVu portal.



## Control Unit

Located in a safe area, the control unit supports on-site storage of video data and provides control room access.



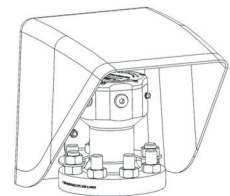
## Hazardous Area Media Converters

Located in a Class 1 Div1 or Zone 1 area, the media converter converts between copper and optical fiber for communication of Ethernet over long distances.



## Safe Area Media Converter

Located in a safe area, the media converter converts between copper and optical fiber for communication of Ethernet over long distances.



## Sunshade

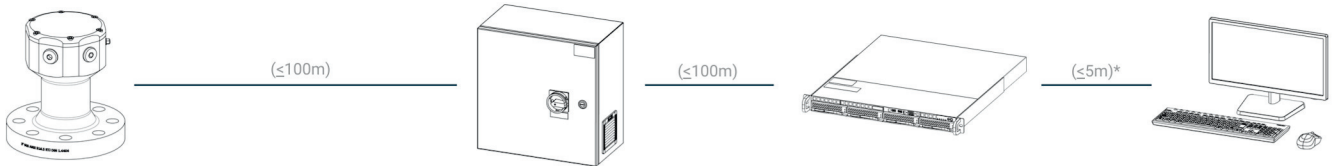
Provides protection for the Camera Can in areas where high sunlight will heat metal above 131°F (55°C).



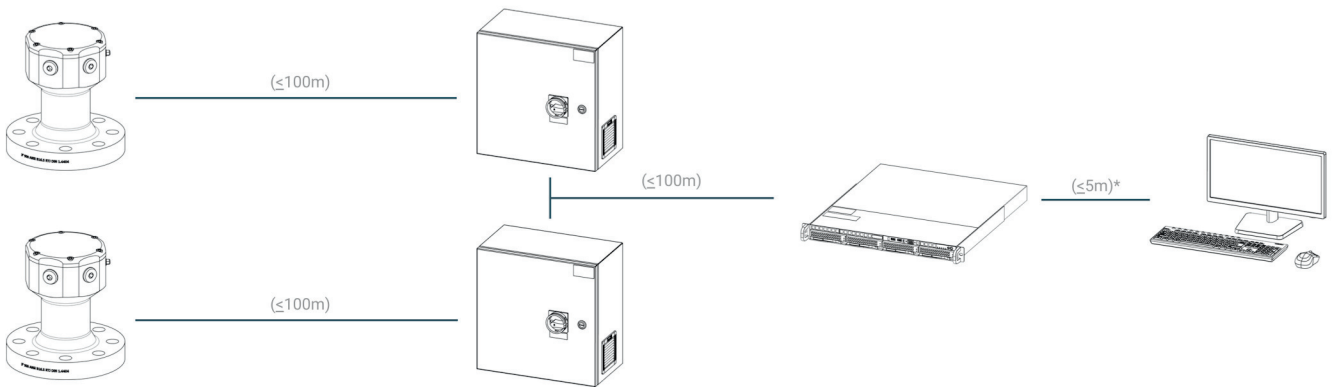


# DEPLOYMENT OPTIONS

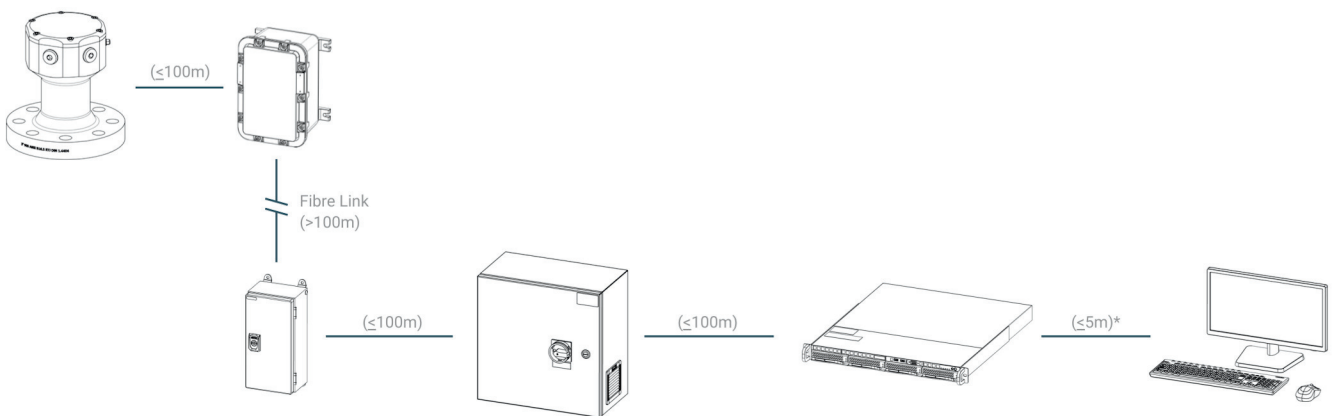
## SINGLE CAMERA



## MULTI CAMERA



## EXTENDED SINGLE CAMERA



\*Greater distances to a control room monitor are possible with an extender



# CAMERA CAN



Flanged



Threaded

## Physical

Process Connection	3" Class 900 RTJ	1" Threaded NPT (Female)
Weight	Approx. 59.5lbs (27kg)	Approx. 37.5lbs (17kg)
Wetted materials	316L Stainless Steel, Sapphire and O-Ring (FKM & FKM ENDURA®)	
Dimensions (H x Ø)	10.2x9.5"(260x241mm)	13.4x5.0"(341x127mm)
Ambient temperature	-4°F to 131°F (-10°C to +55°C) standard (Sunshade recommended)	
Pressure rating	1,500 PSIG (104.4 barg)	
Ingress Protection	IP66/Nema 4x	

## Electrical

Connection (to Interface Unit)	POE+ Ethernet (shielded Cat 5e or higher)	
Port Size	M25	M20
Max cable length	328ft* (100m) between Camera Can and Interface Unit. *A media converter can be use for greater distances	

## Imaging

Sensor	1/2.9" CMOS
Resolution	1.6 MP (1440 x 1080 px)
Maximum Frame Rate	77 FPS
Chroma	Colour
Shutter Type	Global
Pixel Size	3.45x3.45µm
Detection Size	0.004" (0.11mm) *at typical working distance on a 24" pipe

## Approvals

ATEX/UKEX	Ex db IIB+H <sub>2</sub> T4 Gb
UL/CSA	Class 1, Div 1   Groups B,C&D T4   Class 1, Zone 1 AEX db IIB + H <sub>2</sub> T4 Gb  Type 4x & IP66
IECEX	Ex db IIB+H <sub>2</sub> T4 Gb



# INTERFACE UNIT



## Physical

Dimension (H x W x D)	16.02x16.46x10.20" (418x407x259mm)
Weight	35.28lbs (16kg)
Ambient Temperature	41°F to 104°F (5°C to 40°C)
Mounting	Wall Mounted

## Electrical

Power	100-240VAC 50/60Hz (Max. 60W)
Max data cable length	328ft (100m)

## Approvals

Safe Area Use Only
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# LINEVU CONTROLER



## Physical

Dimension (H x W x D)	21.1x17.2x0.17"(538x437x44.5mm)
Weight	31.9lbs (14.5kg)
Ambient Temperature	50°F to 86°F (10°C to 30°C)
Mounting	1U Rack (Bench Top Wall Mounted)

## Electrical

Power	100-240VAC 50/60Hz (Max. 350W)
Signal Out	x2 Ethernet (suggested ≥Cat5e) (connection to Interface Unit)
Max cable length (to Interface Unit)	328ft (100m)
Data Storage	Up to 1 year

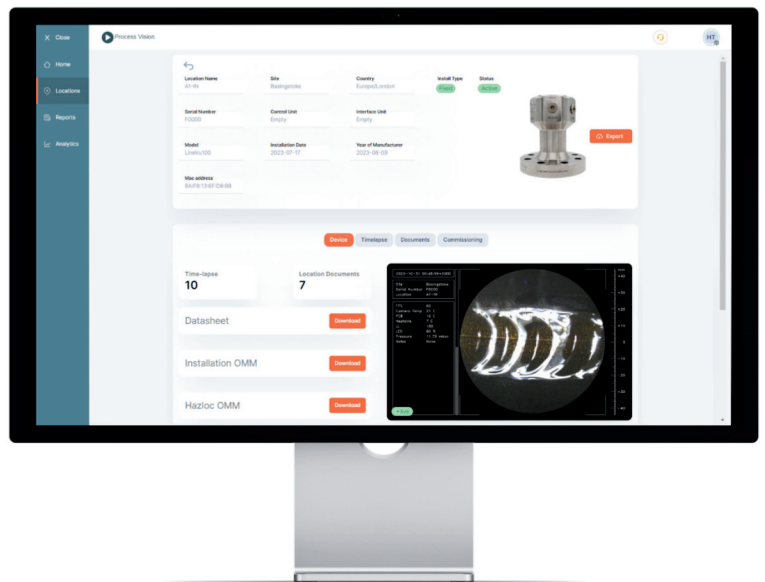
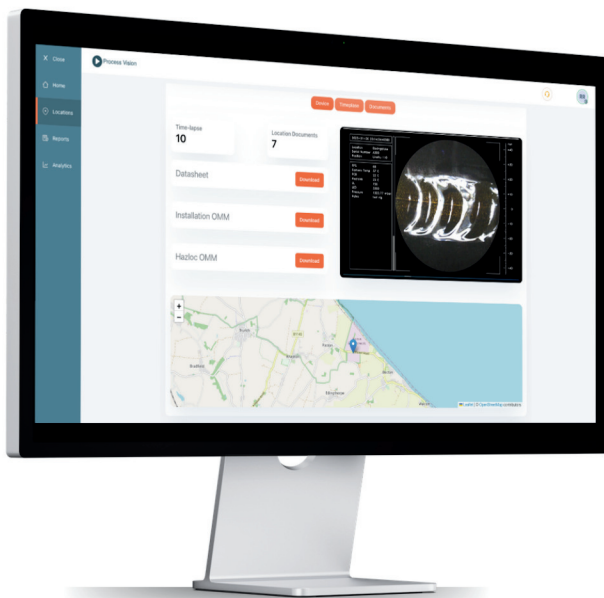




## Now you can find out what's really going on

Get the data you need, when you need it.

The Process Vision portal is the online platform enabling instant access to video analysis and data review for your fleet of installed LineVu systems 24/7 from anywhere in the world.



Remote Access



Fleet Oversight



Support Coordination



Proactive Alarm Notifications



Actionable Monthly Analysis



Document Repository



Report Creation



SLA Management



Process Vision



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