

Well Intervention

WellCAM® - Colour Camera

The WellCAM® Memory Camera utilises digital imagery components with advanced image optimization algorithms. The WellCAM E-Line camera transfers live images to topside in addition to recording high quality images at higher frame rate inside the camera.

The Vision WellCAM® platform consists of several camera versions for different applications:

- WellCAM-Memory
- WellCAM-E-line
- WellCAM Coil
- WellCAM ACTiveCoil
- WellCAM E-Coil Running Tool
- WellCAM Launcher
- MudCAM

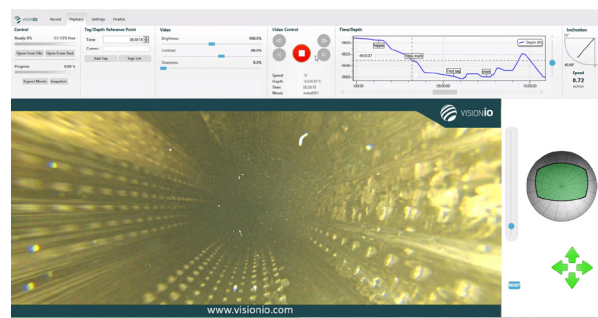
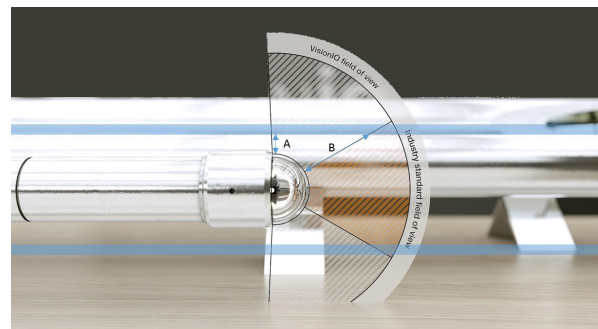
WellViewer Software is used on all cameras, giving the best visual well log available.

Applications

- Only side view camera in memory mode in the market, allowing 360° view of the well
- E-line and memory in one tool
- Fishing, perforation, inspections, water entry, production logging, cae and inspection
- Measures perforations in pan, tilt zoom
- Downhole camera technology solution offered in partnership with VisionIO

Features and Benefits

- Lateral 360° seamless view ensures full sight coverage (no moving parts)
- Fish eye technology, 360° view without switching from front view to lateral view (also in memory version)
- Internal 128GB storage (back-up) capacity, with a recording time of 24 hours
- Zoom, pan and tilt functions in real time data, and post job inspection in recorded data
- Ability to see while pumping up to 2 bbl/min (coiled tubing version only)
- 2592x1944 image resolution



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Technical specifications			
	Vision WellCAM® Memory	Vision WellCAM® E-line	Vision WellCAM® 1 11/16" Memory
Conveyance	Memory	Surface read-out	Memory
Pressure	15.000 psi / 1034bar	15.000 psi / 1034bar	10.000 psi / 689bar
Temperature	125 °C / 257°F (in gas: 105°C / 221°F)	125 °C / 257°F (in gas: 105°C / 221°F)	125 °C / 257°F (in gas: 95°C / 203°F)
Length	1,85m / 6,07ft	1,85m / 6,07ft	2,57m / 8,43ft
Tool diameter	2,25" (2,15" slim edition)	2,25" (2,15" slim edition)	1-11/16"
Weight in air	15kg / 33lbs	15kg / 33lbs	12,7kg / 28lbs
Top connection	UN 1-1/16-10 Slick line (SL)	1-3/16" 12UN (1-3/8" GO Box)	5/8- 11 UNC slick –line (SL)
Fish neck	1,75" FN	1,75" FN	1,00"
Tensile strength	2500kg / 5500 lbs. (middle section)	2500kg / 5500 lbs. (middle section)	6000kg/ 13000lbs
Field of view	185°/ 360°	185/ 360°	185/ 360°
Image sensor	5mpx colour	5mpx colour	5mpx colour
Materials	Stainless steel	Stainless steel	Stainless steel
Storage capacity	128GB (approx. 24 hrs)	128GB (approx. 24 hrs)	128GB (approx. 24 hrs)
Internal frame rate	4x HD frames per second	4x HD frames per second	4x HD frames per second
Operation voltage	Battery operated	+105v - 600v DC	Battery operated
Vacuum valve	Yes	Yes	Yes
H2S rating	Yes	Yes	Yes
Live images during operation	No	Yes	No
Battery	Alkaline up to 85°C & 12 hours Lithium up to 125°C & 24 hours	No	Alkaline up to 85°C & 12 hours Lithium up to 125°C & 24 hours
Max/min borehole/casing/tubing	9 5/8" – 2 7/8"	9 5/8" – 2 7/8"	9 5/8" – 2 3/8"
Bow-string centraliser (in-line)	No	No	1,72" – 4,5"
Pumping rate	N/A	N/A	N/A
Shock absorber	N/A	N/A	N/A

Note: Other sizes, and configurations are available to meet most applications, for more information contact your local Expro representative or email wellintervention@exprogroup.com

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WellCAM® - Colour Camera

Technical specifications				
	Vision WellCAM® 1 11/16" E-line	Vision WellCAM® Coil Tubing	Vision WellCAM® E-Coil	Vision WellCAM® Drill Pipe
Conveyance	Surface read-out	Memory	Surface read-out	Memory or surface read-out
Pressure	10.000 psi / 689bar	15.000 psi / 1034bar	15.000 psi / 1034bar	15.000 psi / 1034bar
Temperature	125 °C / 257°F (in gas: 95°C / 203°F)	125 °C / 257°F (in gas: 105°C / 221°F)	125 °C / 257°F (in gas: 105°C / 221°F)	125 °C / 257°F (in gas: 105°C / 203°F)
Length	2,57m / 8,43ft	2,27m / 7,44ft	1,9m / 6,23ft	2,73m / 8,95ft
Tool diameter	1-11/16"	2-7/8"	2-7/8"	2-7/8" / 6,37"
Weight in air	12,7kg / 28lbs	33kg / 73lbs	25kg / 55lbs	75kg / 166lbs
Top connection	UN 1-3/16-12UN (1-3/8" GO BOX)	2-3/8" PAC	Per request	4,5 IF
Fish neck	1,00" FN	N/A	N/A	N/A
Tensile strength	6000kg/ 13000lbs	N/A	N/A	N/A
Field of view	185°/ 360°	185/ 360°	185/ 360°	185/ 360°
Image sensor	5mpx colour	5mpx colour	5mpx colour	5mpx colour
Materials	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Storage capacity	128GB (approx. 24 hrs)	128GB (approx. 24 hrs)	128GB (approx. 24 hrs)	128GB (approx. 24 hrs)
Internal frame rate	4x HD frames per second	4x HD frames per second	4x HD frames per second	4x HD frames per second
Operation voltage	+105v - 600v DC	Battery operated	+105v - 600v DC	Battery operated or +105v - 600v DC
Vacuum valve	Yes	Yes	Yes	Yes
H2S rating	Yes	Yes	Yes	Yes
Live images during operation	Yes	No	Yes	No
Battery	No	Alkaline up to 85°C & 12 hours Lithium up to 125°C & 24 hours	No	Alkaline up to 85°C & 12 hours Lithium up to 125°C & 24 hours
Max/min borehole/casing/tubing	9 5/8" – 2 3/8"	9 5/8" – 2 3/8"	9 5/8" – 2 3/8"	9 5/8" – 2 3/8"
Bow-string centraliser (in-line)	1,72" – 4,5"	No	No	No
Pumping rate	N/A	Up to 4bbl	Up to 4bbl	Up to 4bbl
Shock absorber	N/A	Yes	Yes	Yes

Note: Other sizes, and configurations are available to meet most applications, for more information contact your local Expro representative or email wellintervention@exprogroup.com