

(Emberion VS20 GigE).

Image sensor specifications	Emberion VS20 CL	Emberion VS20 GigE
Image sensor type	Emberion colloidal quantum dot (CQD) photodiode	
Spectral range	400 to 2000 nm	
Pixel pitch	20.0 μm x 20.0 μm	
Resolution in pixels	640 x 512	
Image size	12.8 mm x 10.24 mm	
Image diameter	16.39 mm	
Fill factor	90 %	
Operable pixels	> 99.9%	
Shutter	Global, built-in electronic	
Cooling	Build-in 2-stage thermo electric cooler (TEC)	
Camera specifications	Emberion VS20 CL	Emberion VS20 GigE
Ambient operating temperature	-40 to +55 °C	
A/D conversion	14 bits	
Image processing	Non-uniformity correction, linearisation, defect pixel correction	
Exposure time	Min 0.5 ms, adjustable with 1 μs resolution	
Supply voltage	11 to 13 V _{DC} (DC power jack)	
Power consumption	8 W (typical)	TBD
Interfaces and mechanics	Emberion VS20 CL	Emberion VS20 GigE
Digital output resolution	16 bits	
Lens mount	C-mount, flange back distance: 17.526 mm	
Dimensions (L x W x H) with the lens mount	168.7 mm x 102.0 mm x 111.5 mm (subject to changes)	TBD
Weight	1.42 kg (subject to changes)	TBD
Trigger	5V TTL input or output (configurable)	TBD
Interface options	Emberion VS20 CL	Emberion VS20 GigE
Image data	Camera Link Base configuration, 1 connector	5GigE configuration, 1 connector
Communications	Camera Link serial communications at 9600 bps	Packet-based, GeniCam compatible
USB-C	For firmware updates only	Not supported
Max frame rate (full VGA)	100 (16 bits)	400 (16 bits)
Trigger	Triggering via Camera Link not supported	Precision Time Protocol (IEEE1588) supported
Powering	Powering via Camera Link not supported	Power over Ethernet, TBD