Thermal Imaging Core
Series OV17



Model	OV17-PL	OV17-ETH	OV17-CL
Sensor Specifications			
Array Type	Uncooled microbolometer		
Detector Pitch	17 µm		
Spectral Band	8 to 14 µm		
Resolution	640(H)x480(V)		
Sensitivity (f#1.0, 300 K)	< 30 mK (High Sensitive) < 50 mK (Standard)		
Pixel Operability	> 99.8 % (High Sensitive) > 99.5 % (Standard)		
Power Requirements			
Power Supply	**Option 1:** 3.7 V to 5.5 V **Option 2:** 6 V to 15 V		
Power Consumption *	< 0.7 W	<1.1W	<1.0W
Power Protection	Under Voltage, Over Voltage, Reverse Voltage, Over Current		
Imaging Performance			
Frame Rate	25/50 Hz		
Time-to-image	< 2 sec		
Digital Zoom	x1, x2, x3, x4		
Digital Zoom (Continuous)	From x1 to x4 with 0.02 steps		
Noise Cancelation	Adaptive Temporal and Spatial Noise Cancelation		
Detail Enhancement	Digital Detail Enhancement		
Image Enhancement	Plateau-based Adaptive Histogram Equalization/Linear/Manual		
Contrast Enhancement	Local Contrast Enhancement		
Color Palette	Up to 8 different palettes		
Live Calibration	With Shutter (periodic or externally controllable)		
Interfaces			
Connector	Molex 40 pin board-to-cable Connector: **5011904017** Mating connector: **5011894010**	Molex 40 pin board-to-cable Connector: **5011904017** Mating connector: **5011894010**	Camlink Connector: **12226-1150-00FR** Mating connector: **HDR-E26MSG1+** Hirose 10 pin board-to-cable. Connector: **DF20EG-10DP-1V(52)** Mating connector: **DF20A-10DS-1C**
Communication	RS232	Ethernet/RS232	Camlink UART/RS232
Digital Video Output	Parallel Video 3.3 V LVCMOS: 16 Data + FVal + DVal + Pixclk	1000 Mbps Ethernet RTSP	Camlink
Analog Video Output	PAL/NTSC		
Physical and Environmental Characteristics			
Working Temperature	[-40 °C, +71 °C]		
Storage Temperature	[-40 °C, +75 °C]		
Weight (Without Optic)	52 g	52 g	54 g
Mechanical Dimensions (mm)	42x42x32.6	42x42x32.6	42x42x39
PCB Dimensions (mm)	32x32		
Typical Applications			
Driver Vision Systems, Thermal Weapon Sight, Surveillance Camera, UAV Camera, Remote Weapon Stations, Human Fever			

* Power consumption @ Vin = 4.0 V, T = 25 °C, Frame Rate =25 Hz)
When analogue video output is enabled, power consumption will be increased by 100 mW.
In all modes, image processing algorithms other than local contrast enhancement are active.
When local contrast enhancement is enabled, power consumption will be increased by 40 mW.