

4KSDI-MINI



12G-SDI POV CAMERAS

APPLICATIONS

Aircraft and Vehicle Recording

Test Range Instrumentation

Specialty Video Production

Security and Surveillance



FEATURES INCLUDE:

- High-quality Sony CMOS Sensors
- 12G / 6G / 3G / HD-SDI Output Formats
- 4K/UHD output or scaled 2K/HD output
- C-mount, Passive MFT-mount or Active EF-mount
- 10-bit 4:2:2, 4:4:4, or RAW Output
- Compact One-Piece Rugged Design
- Synchronize Multiple Cameras via Tri-Level Sync
- Easy to Configure via On Screen Menu



SPECIFICATIONS

Camera Model	4KSDI-Mini	4KSDI-Mini RS
Sensor	Sony Pregius IMX305	Sony Exmor-R IMX183
Output Modes	4K, UHD, 2K, 1080p, up to 60 fps	
Optical Format	4K/2K: 1" (16.0mm diagonal) UHD/1080p: approx. 1" (15.2mm diagonal)	4K/2K: Approx. 2/3" (11.1mm diagonal) UHD/1080p: 2/3" (10.6mm diagonal)
Sensor Type	CMOS w. global electronic shutter	CMOS w. rolling shutter
Sensor Options	Color (Bayer) or Monochrome	
Dynamic Range	73.6 dB	72.0 dB
Output Interface	Single-Link 12G/6G/3G/HD-SDI, Dual-Link 3G-SDI, Quad-Link 3G-SDI (SMPTE ST 292/424/2081/2082)	
Output Format	10-bit 4:2:2(Y'Cb'Cr'), 4:4:4 (RGB) or RAW (Bayer)	
Exposure Control	Automatic (adjusts exposure, gain and/or iris if available) or manual exposure	
Image Enhancement	Gamma (1D LUTs), master pedestal control, adjustable sharpening	
Color Control	Auto white balance or calibrated presets, 3D LUTs, color correction matrix, RGB offsets, saturation control	
Synchronization	Tri-level sync input	
Camera Configuration	RS-485; use handheld remote for OSD, USB adapter for PC software or direct ASCII protocol	
Mechanical/Electrical		
Dimensions	62.0 mm x 62.0 mm x 42.1 mm	
Lens Mount	C-mount (optionally supporting Active EF-Mount or DC Auto Iris lenses) or passive MFT-mount	
Camera Mounting Points	All 4 sides: 1/4"-20 with 2x M4 x 0.7; Front Surface: 4x M4 x 0.7	
Weight	325g (C-mount), 315g (MFT-mount), 550g (C-mount w. Active EF lens adapter attached)	
Power Requirements	7.5W, 7-19V DC	6.5W, 7-19V DC
Operating Temperature	-30°C to 65°C, 20-85% humidity (non-condensing)	
Storage Temperature	-40°C to 85°C, 10-90% humidity (non-condensing)	
Operational Shock/Vibration	Tested per MIL-STD-810G Method 516.6, 3-axis Shock 75G and Method 514.6, 3-axis Vibration Cat. 20	

OUTPUT MODES

Single-Link HD-SDI:

1080p 10-bit 4:2:2/RAW: 23.98, 24, 25, 29.97, 30
2K 10-bit 4:2:2/RAW: 23.98, 24, 25, 29.97, 30

Single-Link 6G-SDI or Dual-Link 3G-SDI:

UHD 10-bit 4:2:2/RAW: 23.98, 24, 25, 29.97, 30
4K 10-bit 4:2:2/RAW: 23.98, 24, 25, 29.97, 30

Single-Link 3G-SDI:

1080p 10-bit 4:2:2/RAW: 50, 59.94, 60
1080p 10-bit 4:4:4: 23.98, 24, 25, 29.97, 30
2K 10-bit 4:2:2/RAW: 47.95, 48, 50, 59.94, 60
2K 10-bit 4:4:4: 23.98, 24, 25, 29.97, 30

Single-Link 12G-SDI or Quad-Link 3G-SDI:

UHD 10-bit 4:2:2/RAW: 50, 59.94, 60
UHD 10-bit 4:4:4: 23.98, 24, 25, 29.97, 30
4K 10-bit 4:2:2/RAW: 47.95, 48, 50, 59.94, 60
4K 10-bit 4:4:4/RAW: 23.98, 24, 25, 29.97, 30

ORDERING

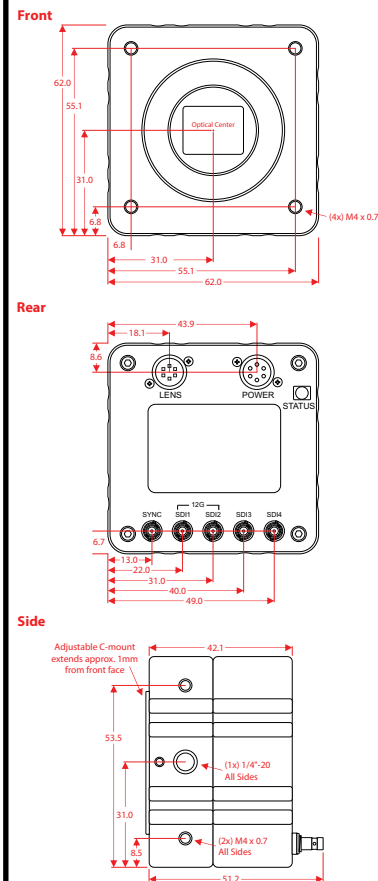
Part Number	Description
4KSDIMINI	Color camera, GS sensor, supports Active EF lens adapter
4KMSDIMINI	Monochrome camera, GS sensor, C-mount, supports Active EF lens adapter
4KSDIMINID	Color camera, GS sensor, supports DC Auto Iris lens control
4KSDIMINI-M	Color camera, GS sensor, MFT-mount
4KSDIMINIRS	Color camera, RS sensor, supports Active EF lens adapter
4KSDIMINIRSD	Color camera, RS sensor, supports DC Auto Iris lens control
4KSDIMINIRS-M	Color camera, RS sensor, MFT-mount

Camera kits available with common accessories included, ie. 4KSDIMINIKIT or 4KSDIMINIKIT-M. Includes selected camera, CABVICBATT, ACPWRTPAP, 485HRMT, 4KMINIHSFAN and CABUSB4852M.

ACCESSORIES

Part Number	Description
VICPWRLIO	AC Power Adapter (Universal) with LEMO for RS485
CABVICBATT	Battery Power Cable with PowerTap connector and LEMO for RS485
ACPWRTPAP	AC Power Adapter (Universal) with PowerTap connector
485HRMT	Handheld remote control w. RS485 interface, for camera control from on-screen display
CABUSB4852M	USB to RS485 adapter cable, 2m, for camera control from PC software
CABLEMO3M	RS485 extension cable (LEMO to LEMO), 3m
VICLENSMOUNT-A	Lens Mount Adapter, C-mount to Active EF-mount
CAB4KMINIDCI	Adapter cable, connects 4KSDI-Mini to DC Auto Iris Lens
4KMINIHSFAN	Heatsink and Fan Assembly, attaches to back side of camera

MECHANICAL DIAGRAMS



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