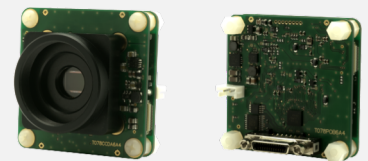




Camera module for Micro satellite “WAT-078H”

Major features

- Adopted high sensitivity CCD sensor suitable for operation in space
- Low cost design realized by diversion of industrial components
- Flexible customization by utilizing design assets



Major applications expected

- Satellite monitoring in outer space, Surface observation of the planet
- Mounting in space exploration equipment



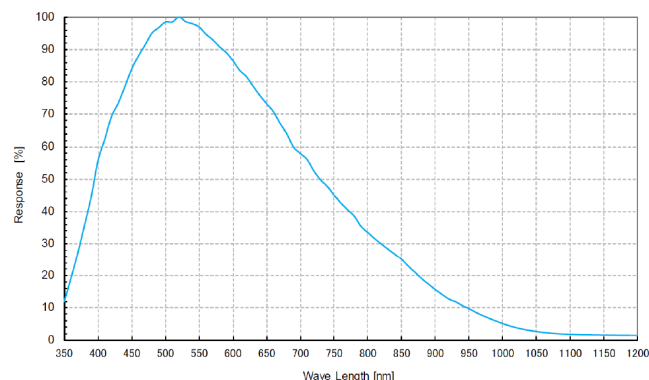
Camera module for Micro satellite “WAT-078H”

Basic specifications	
Image sensor	1/1.8" CCD Image sensor
Total number of pixels / Number of effective pixels	1688(H) x 1248(V) / 1644(H) x 1236(V)
Cell size	4.4[μm] x 4.4 [μm]
Synchronization / Scanning method	Internal synchronization / progressive scan
Electronic shutter	High speed shutter [sec] : 1/25, 1/50, 1/100, 1/200, 1/400, 1/1000, 1/2000, 1/4000, 1/10000 Low speed shutter [FRM] : 1~128 (can be set in 1 frame unit)
CDS gain	can be set in 0 to 18 [dB], 3 [dB] increments (standard: 6 [dB])
PGA gain	can be set in increments of -0.54 to 36.1 [dB], about 0.036 [dB]
Video output interface	LVDS(12Bit, CameraLink Base configuration) 1TAP (60MHz) / 2TAP (30MHz) switchable
Video output format	1636[H] x 1220[V], 25[fps]
Supply voltage / range	DC+5[V] \cdot 4~16[V]
Lens mount	CS mount
weight	Approximately 38 [g] (with connector) / about 35 [g] (without connector)

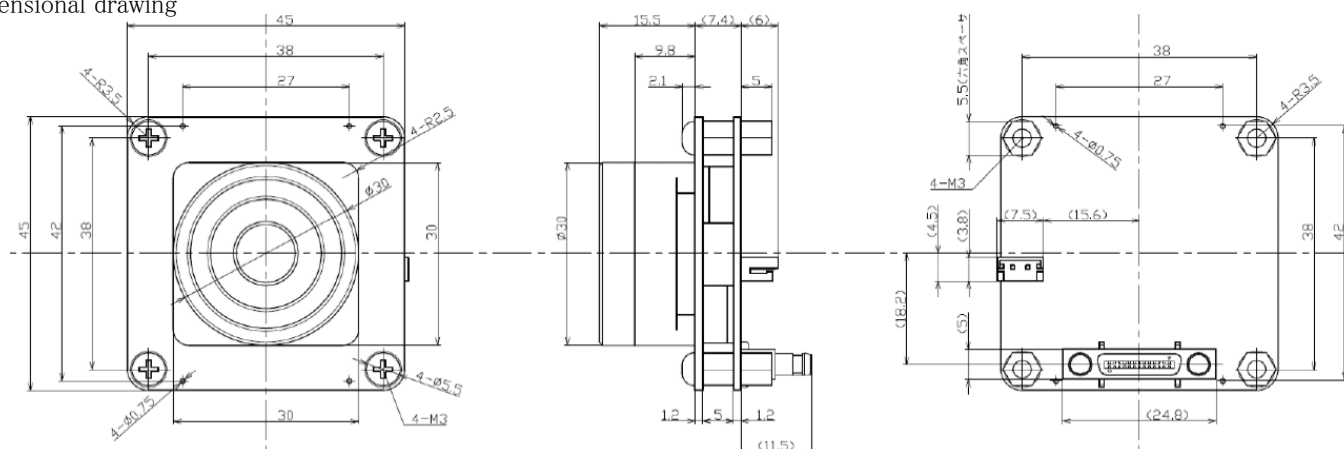
Other features

- Square grid, adopt progressive scan CCD sensor
- Electronic shutter function (global shutter)
- VGA gain setting function
- Detailed digital conversion, A/D resolution 12 [Bit]
- CameaLink (Base configuration) with high versatility is adopted
- External trigger shutter function
(Equipped with a random trigger function that can obtain arbitrary exposure time at arbitrary timing)

Spectral Sensitivity Characteristics



Dimensional drawing



WATEC SPACE VENTURES

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● The contents of this document are as of 2018 April.

● The contents of this document are subject to change without notice. Please contact us for product details.