# ALRAD Instruments Imaging Spotlight October 2023

Welcome to our October 2023 Imaging Spotlight. In this month's issue we focus on the latest Water range of cameras:

- WATEC 1/2.8" Multi-function Compact High Sensitivity Analogue Cameras:(Color) WAT-2500 / (B&W) WAT-3500
- 1200CS NTSC & 1100MBD G3.6 NTSC Low light Day/Night cameras
- WAT-05U2M Wearable USB Color Camera, 1/2.8", USB2.0, Full HD, Water Resistant
- WAT-06U2D USB2.0 Full HD Wearable Color Camera
- WAT-07U2D Ultra-Low Light B/W USB CS Mount Camera
- WAT-08U2 (G3.6) 1/2.8" Ultra-compact USB2.0 Full HD Color Camera
- WAT-09U2 (G3.6) 1/2.8" Ultra-Compact USB 2.0 Full HD B&W Camera
- WAT-1300 (G3.6) 1/3.2" Ultra-Compact high sensitivity 3G/HD-SDI Day/Night Camera, for surveillance to embedded applications

For more information and to order, please follow the link  $\rightarrow$  or call the ALRAD Sales Team on 01635 937000 , we will be happy to help:

Watec Cameras

## WATEC 1/2.8" Multi-function Compact High Sensitivity Analogue Cameras: (Colour) WAT-2500 / (B&W) WAT-3500



WAT-2500 and WAT-3500, 1/2.8" CMOS Sensor Analogue (PAL / NTSC & CCIR / EIA format) multi-function compact high sensitivity analogue cameras.

#### **Key Features:**

- 1. Typical design model with multi-functions in a small body
- 2. 1/2.8 inch BSI CMOS image sensor with high sensitivity
- 3. Advanced setting available by OSD (On Screen Display) through an optional remote controller.



WAT-2500 1/2.8" Multi-function Compact High Sensitivity Analogue Colour Camera

This camera is a near equivalent to the discontinued WAT-250D2 ½" CCD Camera

#### **Key Features:**

- 1/2.8-inch BSI CMOS image sensor with high sensitivity
- Advanced setting available by OSD (On Screen Display) through an optional remote controller
- Min. illumination 0.0065 lx F1.2 (AGC HIGH=72dB, Shutter=OFF) 0.0004 lx F1.2 (AGC HIGH=72dB, Shutter=x15)



Watec's WAT-3500 camera is a direct drop in successor to the 910 and 902 series models. It was designed and developed to provide cutting edge, ultra-low light technology via an analogue formatted, b/w camera.

#### **Key Features:**

- Super low light with a min. illumination of 0.0001lx / 0.000007lx.
- High definition analogue b/w camera
- 1/2.8" BSI CMOS image sensor
- OSD menu options (through RC-01)
- · Lots of adjustability

# 1200CS NTSC & 1100MBD G3.6 NTSC Low light Day/Night cameras

### **1200CS NTSC**

1100MBD G3.6 NTSC



1/3.2 BSI CMOS sensor Day/Night camera W/0.005lx & 750TVL

This miniature enclosed, CS mount type day/night camera has OSD interface allowing you to customise the camera features making it



The WAT-1100MBD is Watec's new high resolution (750tvl), low light, day/night solution provided to you in an ultra miniature package!

At 23x23mm this mini day/night camera has OSD interface allowing you to customise the camera

compatible with nearly all applications. Can also be modified to RS232 interface.

#### **Key features:**

- High sensitivity min. illumination 0.005 lx F1.8 (AGC 54dB)
- Wide dynamic range
- ICR non-mechanical Day/Night function
- Advanced setting available by OSD (On Screen Display) through an optional controller
- 2DNR ON (Level adjustable)

features making it compatible with nearly all applications. Its small size and application adaptability, make this camera perfect for systems integration and concealment.

#### **Key features:**

- High sensitivity min. illumination 0.005 lx F1.8 (AGC 54dB)
- Ultra-compact 23x23x34 mm
- Wide dynamic range
- ICR non-mechanical Day/Night function
- Advanced setting available by OSD through optional controller
- 2DNR ON (Level adjustable)

### Wearable USB Colour Camera - WAT-05U2M 1/2.8" USB2.0, Full HD, Water Resistant







Dimensions: H30xW30xD22(mm)

Adopting a 180 degree wide angle lens enables Full HD Ultra-Wide video.







WAT-05U2M

<sup>\*</sup>The vignetting occurs due to the wide angle lens.

The position of the cable is selectable in 4 dimensions (top, bottom, left and right) depending on the application and installation requirement. (Std. position: bottom) \*The other sides are available on request.



Helmet (Cable Sideways)



Chest Pocket (Cable Lower Side)

#### Live video via Wi-Fi or 4G/3G



Enable the live video transmission via the smartphone or tablet by its Wi-Fi or 4G/3G



#### **Drip-proof (\*IPX7 compliance)**

- Equivalent to JIS Waterproof Grade 7 (IPX7)\* Watec compliance test
- No ingress of water into the camera after left in water of up to 1 m depth for up to 30 minutes.
- Designed for use in rain and wind.



Tripod adaptor (1/4-20UNC) for the MS50 (Stand) and tripod.



Fixing the **B008** and camera by the supplied 4 screws.

# WAT-06U2 Full HD Wearable Colour Camera

1/2.8" Compact USB2.0 Full HD Wearable Colour Camera

# WAT-07U2 Ultra-Low Light B/W USB Camera

1/2.8" Compact High Sensitivity USB2.0 Full HD Wearable B&W Camera













#### **Key Features:**

- Compact design for embedded applications
- Directly import image to your PC.
- Resolution 1.3 times higher and sensitivity 4x higher than previous model
- The Internal ISP (Image Signal Processor) for optimal image quality
- USB Video Class & USB Bus Power (Plug & Play)
- Simple viewer software with features to change the camera settings and capture images

#### **Key Features:**

- Directly import image to your PC
- Min. Illumination 0.002 lx F1.4 (ACG ON=36dB, Shutter=OFF) 0.0005 lx F1.2(ACG ON=36dB, Shutter=1/7.5 sec.))
- The Internal ISP (Image Signal Processor) for optimal image quality
- USB Video Class & USB Bus Power (Plug & Play)
- Simple viewer software with features to change the camera settings and capture images

# WAT-08U2 (G3.6) 1/2.8" Ultra-compact USB2.0 Full HD Colour Camera



The smallest model in the Water USB series:

Watec's NEW ultra low light Miniature Colour USB, M12 mount camera is finally here! fully adjustable and the quality ISP provides crisp, clean imagery even in low light environments!

#### Key Features:

- 1/2.8" CCD Sensor
- Full HD Resolution more than 900TLV
- USB Power
- LUX: 0.07 lx F2.0 (AGC ON=36dB, Shutter=1/7.5 sec.)

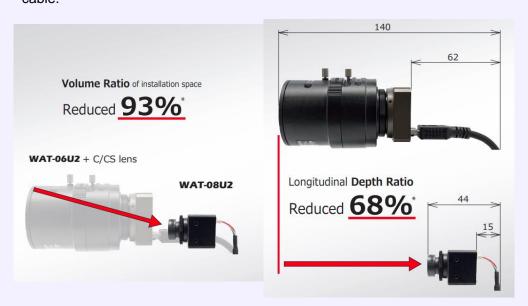


- Micro size 20.5 x 20.5 x 30 (mm)
- Focusing ring on the lens
- Wide-angle to telephoto lenses available
- Dedicated connection cables reduce installation dimensions
- Flexible mounting screw holes on front and side of main unit
- Low power consumption 0.75W





Space saving is achieved through the use of an M12 lens and dedicated USB cable:



#### **Key Features:**

- 1/2.8" CMOS sensor with high quality video output at 30 fps in full HD
- USB Video Class & USB BUS Power (Plug & Play)
- Lens fixing ring prevents misalignment of focus
- Ideal for embedding due to the specially designed USB connector which reduces depth
- Various optional M12 lenses available \* Standard lens: G3.6

### WAT-09U2 (G3.6)

1/2.8" Ultra-Compact USB 2.0 Full HD B&W Camera



#### **Key Features:**

- 1/2.8" CMOS sensor with high quality video output at 30fps in full HD
- Ideal for embedding due to specially designed reduced depth USB connector
- Optional M12 lenses available \*Standard lens: G3.6
- Lens fixing ring prevents misalignment of focus
- Minimum illumination 0.004 lx F2.0 (AGC HIGH = 36dB Shutter = Off 0.001 lx F2.0 (AGC HIGH = 36dB, Shutter = 1/7.5 sec.)

# WAT-1300 (G3.6) 1/3.2" ultra-compact high sensitivity 3G/HD-SDI Day/Night Camera, for surveillance to embedded applications





#### **Key Features:**

- HD-SDI 720/60p and 50p output formats enable smooth video recording with minimal delay
- Low power consumption and low heat generation by using a 1 MP sensor
- High sensitivity enables clear images even in low-light environments
- Despite its small size, the camera is equipped with a day/night function by using a dual-pass filter
- Optional M12 lenses available \*Standard lens: M3620BC-12 (G3.6)
- Advanced setting available by OSD (On Screen Display) through an optional remote controller

## WAT-240E/CB (G3.8) Compact cylindrical camera with Built-in lens



Fully adjustable bullet camera. 1/4" CMOS sensor with 480TVL and 0.3lx at F2.0 with M12 glass f3.8 F2.0.

#### **Key Features:**

- Improved resolution of 480TVL
- Versatile use for limited space, general surveillance, embedded systems and as a part of image processing system
- Optional M12 lenses available

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### **ALRAD Instruments - Technology Divisions**













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ALRAD Instruments Limited celebrated its 50th Anniversary in 2020. Set up in 1970, ALRAD Instruments has been serving the Industrial, Scientific, Medical and Instrumentation markets for five decades and has a wealth of experience in all aspects of Imaging, Photonics, Thermal and Medical sectors.