

# iCAM502 Intrinsically Safe Autofocus Digital Camera



- ATEX and IECEx Zone 0 certified
- North American Class 1 Division 1 certified (pending)
- Clear images from hazardous areas
- Accompanying audio records for added information
- Highly rugged for use in industrial environments

## Easy to use

The iCAM502's elegant form factor lends itself to single handed operation even when wearing gloves and, weighing less than 200g, it's convenient to carry in your pocket. Powered by standard alkaline cells, the iCAM502 is ready to use anytime, any place.

## Design for harsh environments

The rugged injection moulded anti-static plastic housing and removable silicon rubber casing are very durable and rated IP65, making the iCAM502 suitable for use in the most arduous environments.

## Store records

The iCAM502 has a 1GB memory, allowing storage of approximately 5,000 JPEG images without any audio recording and additional 960Kbytes per minute for audio.

## Simple data transfer

Transfer data to any safe area computer in three simple steps; open, connect directly via a USB port (no need for an external protection barrier), and transfer data utilising the Picture Transfer Protocol (PTP), which is initiated automatically.

## High quality images

Equipped with an advanced anti-shake and image sharpness analysis, the iCAM502 provides consistently high quality images. Instant feedback is given to the user via 3 LEDs, which flash alongside an audible beep to signify image quality.

## Keep detailed information records

Voice annotations can be added to images and are stored as a .wav file corresponding to the image file name. Additionally, all images are date and time stamped to create a chronological history and make it easy to identify each photograph.

## High performance autofocus lens

The iCAM502 can take high resolution images at distance, providing greater detail of equipment or larger areas such as plant rooms and buildings. It can also take close-ups, producing pin-sharp images as close as 5cm from the object, making it ideal for inspections or images of rating plates.

## Suitable for varied light conditions

The super bright 4 LED flash allows for picture capture in very poor light conditions, such as underneath equipment. Variable flash technology provides the correct amount of illumination required, reducing flashback on reflective objects.



## Specification

### Certification

#### ATEX:

Ⓜ II 1 G Ex ia IIB T4/T3 Ga, II 2 G Ex ia IIC T4 Gb, -20°C ≤Ta≤ +60°C

I M1 Ex ia I Ma 0°C ≤Ta≤ +60°C

#### IECEX:

II 1 G Ex ia IIB T4/T3 Ga, II 2 G Ex ia IIC T4 Gb, -20°C ≤Ta≤ +60°C

Ex ia I Ma 0°C ≤Ta≤ +60°C

#### North American (MET): (pending)

Intrinsically Safe for Class 1, Division 1, Groups A,B,C,D T4/T3C -20°C≤Ta≤55/50°C (USA and Canada)

### Compliance

EMC: EN 55022 1998 class B, EN 55024 1999

LV: EN 60950 2002

FCC: Class A device, compliance through verification route

### Ingress protection

IP65

### Dimensions

132 x 32 x 22 mm (5.20 x 1.26 x 0.87 in)

### Weight

Approximately 200g, including batteries

### Operating temperature

Group II -20°C to +60°C / Group I 0°C to +60°C

### Relative humidity

95% non-condensing

### Housing

Injection moulded antistatic plastic housing, supplied with antistatic silicone rubber boot for additional shock protection

### Power

2 x Alkaline AA batteries, refer to ATEX Certificate for details on range of approved batteries. Batteries may not be carried or changed in Group I hazardous areas.

### Power modes

Operate and auto power-down (after 3 mins)

### Battery life

Up to 600 shots without flash and up to 100 shots with flash taken one after the other. 170 shots as per the CIPA DC-002 standard (mixed mode shots with and without flash)  
*Note it is very difficult to be precise about exact numbers as there are many factors that can influence this such as the ambient temperature, how long the camera is powered up, number of voice recordings made and the number and length of time it is connected to a PC for transferring picture and voice data.*

### Memory

On board 1GB NAND Flash (holds approx. 5,000 JPEG images without any audio recording and additional 960Kbytes per min for audio)

### Image

3.1 Mega-Pixel (2048 x 1536 resolution)

### Lens

Autofocus lens, effective focal length 3.39mm, F2.8, 68° diagonal field of view

### Focal distance

5cm to infinity

### View finder

Two element optical view finder

### Flash

4 LED flash giving 131 lux.seconds of energy at 67ms exposure

### Connectivity

USB 1.1 via mini-USB socket for use in the safe area only. Certified for direct connection to a PC without requiring an external protection barrier

### OS support

PTP imaging device in Windows XP/Vista/7/8 and most versions of Linux.  
USB firmware upgrade utility for Windows XP/Vista/7/8 only.

### Audio recording format

.wav

### Image format

.jpeg

### Time and date

Time and date stamping of stored images and filenames

Time and date set via Picture Transfer Protocol (PTP) automatically

## Ordering Information:

iCAM502 Intrinsically safe zone 0 digital camera including rubber casing, lanyard, and 2 x AA batteries  
Removable silicon rubber casing

ICAM502  
A250084

### Extronics Limited

1 Dalton Way, Midpoint 18, Middlewich, Cheshire, UK. CW10 0HU

Tel: +44 (0) 845 277 5000 Fax: +44 (0)845 277 4000 E-mail: [info@extronics.com](mailto:info@extronics.com) Web: [www.extronics.com](http://www.extronics.com)

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