iCAM502 - Intrinsically Safe Zone 0 Digital Camera With Auto Focus

Create visual and audio records in the hazardous area….

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

M1 Ex ia I Ma 0°C ≤Ta≤+60°C

IECEx Ex ia IIB T4 Ga, Ex ia IIC T4 Gb, -20°C ≤Ta≤+60°C

Ex ia I Ma 0°C ≤Ta≤+60°C

IP65

Overview

The iCAM502 intrinsically safe digital camera is the perfect visualisation tool for use in hazardous areas. With a high performance auto-focus lens, the iCAM502 can take crystal clear pictures from as close as 5cm, making it ideal for inspections, images of rating plates etc. ATEX and IECEx certified, the iCAM502 can be used in all sectors of industry including Chemical & Pharmaceutical plants, Oil & Gas production platforms and Refineries.

Manufactured from rugged injection moulded anti static plastic, the iCAM502 is IP65 rated and is suitable for use in the most arduous environments. Its long slim lightweight enclosure, weighing less than 200g, lends itself to single handed operation, making it convenient to carry in your pocket. The removable silicon rubber casing further enhances durability and improves handling, particularly when using protective gloves.

Equipped with an auto-focus lens, super bright 4 LED flash, variable flash intensity, advanced anti-shake and image sharpness analysis, the iCAM502 provides high quality images in all Hazardous Area environments. Image quality feedback is provided via the camera's three LED lights. The lights flash in sequence to indicate picture quality.

Data transfer to any computer in the safe area is simple and easy to undertake via a USB port utilising Picture Transfer Protocol (PTP) which is initiated automatically.   All images are date and time stamped to create a chronological history and are coupled to the unique function of Voice Annotation Audio records, which are systematically matched to the image filename.

Features and Benefits

Rugged Housing - Compact & Lightweight
The injection moulded anti-static plastic housing and removable silicon rubber casing makes the iCAM502 suitable for use in the most arduous environments. The elegant form factor lends itself to single handed operation and weighing less than 200g is convenient to carry in your pocket.

Super Bright 4 LED Flash
The powerful integrated flash allows for picture capture in very poor light conditions. Variable flash technology provides the correct amount of illumination required reducing flashback on reflective objects.

Image Quality Feedback
In order to give users instant feedback on picture quality, the 3 LED lights flash simultaneously with an audible beep to signify the image taken should be of good quality.

Voice Annotations
Never forget - record voice notes to store a .wav file with the same filename as the image taken for detailed reports.

Advanced Image Sharpness Analysis
High quality images are produced every time, minimising the possibility of blurring.

Date & Time Stamp on Image
Clear chronological information on the image and within the filename allows for easy identification of a particular shot

High Performance Auto-Focus Lens
High resolution images at distance provide greater detail of equipment or larger areas such as plant rooms and buildings. Auto-focus lens produces pin-sharp images as close as 5cm from the object.

1GB Memory
Allows for a much higher level of visual/audible data storage Hold approximately 5,000 JPEG images without any audio recording and additional 960Kbytes per minute for audio
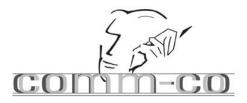
Simple Data Transfer
3 Simple Steps— open, connect via a USB port and transfer data utilising the Picture Transfer Protocol (PTP). Certified for direct connection to any PC in the safe area without requiring an external protection barrier.

Powered by Primary Cells
Certified for use with leading brand alkaline cells means the camera is always ready to use any time, any place.

Specification

Certification Number	ITS09ATEX26868X, IECEx ITS 09.0027X
ATEX Certification	II 1 G Ex ia IIB T4 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 Certification	II 1 G Ex ia IIB T4 Ga, II 2 G Ex ia IIC T4 Gb, -20°C ≤Ta≤ +60°C Ex ia I Ma 0°C ≤Ta≤ +60°C
Compliance	EMC: EN 55022 1998 class B, EN 55024 1999 LV: EN 60950 2002 FCC: FCC: Class A device, compliance through verification route
Dimensions	132mm x 32mm x 22mm (5.20" x 1.26" x 0.87")
IP Rating	IP65
Operating Temperature	Group II -20ºC to +60ºC / Group I 0ºC to +60ºC
Weight	Approx 200g including batteries
Housing	Injection moulded anti static plastic housing, supplied with antistatic silicone rubber boot for additional shock protection
Relative humidity	95% RH non condensing
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.
Memory	On board 1Gbyte 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, 68º diagonal field of view
Focal Distance	5cm to infinity
View Finder	Two element optical view finder
Power Modes	Operate and auto power-down (after 3 mins)
Battery Life	Up to 800 shots without flash and up to 150 shots with flash taken one after the other. 310 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.
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 and most versions of Linux. USB firmware upgrade utility for Windows XP/Vista/7 only.
Flash	4 LED flash giving 131 lux.seconds of energy at 67ms exposure
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

Description	Part Number
Intrinsically safe zone 0 digital camera inc. rubber casing, lanyard and 2 x AA batteries	iCAM502
Removable silicon rubber casing	iCAM501SRC