



# Rugged, High-Resolution

Heated, weatherproof enclosure for harsh, remote locations

#### Overview

The CC5MPXWD is similar to the CC5MPX, except it includes an internal defroster that prevents and removes light frost and icing from the camera's window. This high-resolution digital camera produces JPG images with a resolution of up to 5

megapixels, and shoots videos with a resolution of up to 720P. It has an integrated environmentally sealed enclosure that protects the camera from moisture and high humidity. An SD memory card for image storage is available as an option.

#### **Benefits and Features**

- **)** Compatible with PakBus data loggers
- Can be controlled by internal timer or by external controls: motion detector, web page, data logger
- Designed to work in harsh environments, this camera operates at temperatures as low as -40°C and as high as 60°C

### **Detailed Description**

The CC5MPXWD can function as a stand-alone camera or can be connected to a Campbell Scientific data logger or another PakBus device. It has several options for image acquisition and storage. You can take still images or videos based on an internal timer, motion detection, or a trigger from an external PakBus device (such as a data logger). The images or videos can then be stored on an SD card, saved in a data logger's memory, sent to a PC via email, or transmitted to an FTP server.

The CC5MPXWD's defroster consists of an aluminum ring with a resistive type heating element. Springs are used to press the defroster against the camera's window.

The defroster turns on when the internal temperature is below a specified value and not in the low powered state. You can also specify the number of minutes before a self-timed schedule that the defroster will turn on.

With extreme icing or riming conditions and low temperatures, the window defroster may not be able to clear the window due to the power constraints of the defroster.



## **Specifications**

Heating Element Resistance 18 $\Omega$	
Operating Power	9 to 16 Vdc Operating at voltages greater than 16 Vdc can damage the camera.
Operating Temperature Range	-40° to +60°C
Clock Accuracy	±2 minutes per year (-40° to +60°C)
Photo or Video Capture Triggers	Two independent self timers, external trigger, motion detection, web page control
Programmable Still Image Resolutions	<ul> <li>320 x 240 (JPEG)</li> <li>2592 x 1944 (JPEG)</li> <li>1280 x 960 (JPEG)</li> <li>1280 x 720 (JPEG)</li> <li>640 x 480 (JPEG)</li> <li>640 x 352 (JPEG)</li> <li>320 x 176 (JPEG)</li> </ul>
Video	Capable of up to 720P for the following:  1280 x 720 (MPEG4) 640 x 480 (MJPEG) 320 x 240 (MPEG4)
Communication Interfaces	RS-232 port; RS-485 port; Ethernet 10/100
Communications Protocols	PakBus, FTP, email, web page interface via web browser
Maximum Baud Rate	115.2 kbps (for RS-232 and RS-485 only)
Window Defroster	Yes
Wi-Fi Capable	No
Low-Light Capability	Not designed for low-light conditions.
NDVI Capability	No
Diameter	9.3 cm (3.7 in.)
Length	22 cm (8.7 in.)
Weight	1.06 kg (2.34 lb)

Communication Switched Power Output		
Maximum Output Current	750 mA	
Current Drain (camera only)		
Maximum	250 mA (at 12 Vdc)	
Quiescent	≤1 mA (off power mode)	
Current Drain (with defroster on)		
Typical	1.0 A (@ 12 Vdc)	
Maximum	1.2 A (@ 16 Vdc)	
Lens		
Mount	C-type	
IRIS	DC compatible	
Standard Lens	4 to 12 mm, 27° to 80° FOV	
External Input Signal		
Logic Low Level	0.65 Vdc (-20 Vdc absolute minimum)	
Logic High Level	> 2.0 Vdc (+20 Vdc absolute maximum)	
Minimum Pulse Width	10 ms	
Memory Card Interface		
Туре	Secure Digital (SD)	
File System	FAT32	
File Type	JPEG (image), AVI (video)	
Size	16 GB or less	
Photo Capture Time		
-NOTE-	Time is from wake-up to start of capture.	
Fully On	< 1 s (5 MP images take longer.)	
Partially On	10 s	
Deep Sleep	15 s	





90 s



Off State