

# Rugged, High-Resolution



## Overview

The CC5MPX and CC5MPXWD are high-resolution digital cameras with video capabilities. They produce JPG images with a resolution of up to 5 megapixels, and shoot videos with a resolution of up to 720P. Power conserving modes allow the cameras to be used in remote battery-powered installations.

Designed to work in harsh environments, the cameras can operate at temperatures as low as -40°C and as high as 60°C. They have an integrated environmentally sealed enclosure that protects them from moisture and high-humidity. Additionally, the CC5MPXWD includes a window defroster that prevents and removes light frost and icing\* from the camera's window.

### **Benefits and Features**

- **)** Low power consumption
- Can be controlled by internal timer or by external controls: motion detector, web page, datalogger
- Designed to work in harsh environments, this camera operates at temperatures as low as -40°C and as high as 60°C

# **Technical Details**

The CC5MPX and CC5MPXWD have several options for image acquisition and storage. Still images or videos can be taken based on an internal timer, motion detection, or a trigger from a PakBus

device (datalogger or MD485). The images or videos can then be stored on an SD card, saved in a datalogger's memory, sent to a computer via email, or transmitted to an FTP server.

\*With extreme icing or riming conditions and low temperatures, the CC5MPXWD's window defroster may not be able to clear the window due to the power constraints of the defroster.

# **Ordering Information**

#### **Digital Cameras**

CC5MPX CSC High Resolution Digital Network Camera (-40° to +60°C)

**CC5MPXWD** CSC High Resolution Digital Network Camera with window

defroster (-40 $^{\circ}$  to +60 $^{\circ}$ C)

#### Memory Option (choose one)

-NC No SD Memory Card-4G 4 GB SD Memory Card-8G 8 GB SD Memory Card

**Accessories** 

**#18549** CC5MPX Mounting Kit for mounting to a crossarm.

**CC5MPXCBL1-L** CC5MPX Power and I/O Cable (required). Enter cable

length, in feet, after the -L. Maximum length is 100 ft.

CC5MPXCBL2-L CC5MPX RJ45 Environmental Cable. Connects camera

to computer. Enter length, in feet, after the -L. Maximum

length is 225 ft.

**#28900** 10Base-T CAT5 Ethernet Cable with 10 ft length. Connects

camera to a computer. Use for indoor applications only.

**#28033** Ethernet Surge Protector helps protect device from electrical surges. An Ethernet cable is required to connect the 28033

to the camera. Another Ethernet cable such as the 28898 or 28899 is used to connect the 28033 to the computer or hub.

**#28898** CAT5e, unshielded straight through cable (6 in). This

cable is often used with the 28033 Surge Protector

**#28899** CAT5e, unshielded straight through cable (2 ft). This

cable is often used with the 28033 Surge Protector



Above is a photograph taken by the CC5MPX camera. Campbell Scientific Canada installed the camera high above Edmonton's spectacular river valley on the University of Alberta's H.M. Tory Building. The camera records visual weather conditions every 15 minutes and transfers the image via FTP to a local server.

# **Specifications**

**)** Diameter: 9.3 cm (3.7 in.)

**)** Length: 22 cm (8.7 in)

Weight: 1.06 kg (2.34 lb)

• Operating Temperature: -40° to +60°C

Clock Accuracy: ±2 minute per year (-40° to +60°C)

- Image or Video Capture Triggers: Two independent self timers; external trigger; motion detection; web page control
- Programmable Still Image Resolutions (JPEG): 2592 x 1944; 1280 x 960; 1280 x 720; 640 x 480; 640 x 352; 320 x 240; 320 x 176
- Video: Capable of up to 720P for 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

### Lens\*\*

- Mount: C-type
- > IRIS: DC compatible
- ) Size: 4 to 12 mm
- Field Of View: 27° to 80°

### **Operating Power**

- CC5MPX: 9 to 30 Vdc
- CC5MPXWD: 9 to 16 Vdc

### **Current Drain**

- Operating (camera only): 250 mA (maximum at 12 Vdc)
- **>** Quiescent: ≤1 mA (off power mode)
- C5MPXWD defroster on: 1.2 A (maximum at 16 Vdc); 1 A (typical at 12 Vdc)

### Memory Card Interface

- > Type: Secure Digital (SD)
- File System: FAT32
- File Type: JPEG (image), AVI (video)
- Size: 16 GB or less

### Image Capture Time (from wakeup to start of capture)

- Fully On: < 1 s (5 MP images take longer)
- ▶ Partially On: 10 s
- Deep Sleep: 15 s
- ) Off State: 90 s

<sup>\*\*</sup>A manual zoom lens can be special ordered for both the CC5MPX and the CC5MPXWD; contact Campbell Scientific for more information.

