



18x Optical Zoom and Auto Focus

Multiple lens positions available
for each capture event

Overview

The CCFC Field Camera is a high-quality, high-resolution outdoor zoom video and still image camera specifically designed for remote outdoor observation applications. The camera captures high-quality photos and video in wide-angle, and with 18x optical zoom, under various lighting conditions. Our Field Camera consumes low power, making it ideal for outdoor observation in remote locations using a solar-power battery. The camera can also operate with ac power where ac is available. It has a high-quality, very rugged anodized aluminum environmental case that enables its outdoor use in extremes of temperature. The Field Camera is compatible with Campbell Scientific data loggers, as well as other data logger brands.

Featuring New NDVI Capability!

With OS version 2.5 or above, the CCFC Field Camera is able to function as a [normalized difference vegetation index \(NDVI\)](#) sensor. This feature uses infrared data to produce a visualization of live green vegetation in the image. This allows the user to determine at-a-glance areas of healthy growth and areas where growth is less abundant. Applications for NDVI include vegetation dynamics, biomass production, grazing management, changes in rangeland condition, soil moisture, and CO₂ flux.

For more information about the CCFC, read the [blog article](#).

Benefits and Features

- › Auto focus lens
- › Easy to use web interface
- › New NDVI capabilities
- › Configure up to 15 preset lens positions
- › Type 3 anodization for improved performance in corrosive environments
- › IR LEDs for night photos
- › 16 GB of built-in memory
- › 18x optical zoom lens
- › Can be controlled by internal timer or by external controls: motion detector, web page, data logger
- › Window defroster
- › High-quality; designed for outdoor observation in remote locations
- › Designed to work in harsh environments, this camera operates at temperatures as low as -40°C and as high as 60°C

Specifications

Operating Power 9 to 30 Vdc

Operating Temperature -40° to +60°C
Range

Clock Accuracy	±2 minutes per year (-40° to +60°C)
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)
Diameter	9.3 cm (3.7 in.)
Dimensions	28.4 x 13.2 x 13.0 cm (11.2 x 5.2 x 5.1 in.)
Weight	2.38 kg (5.25 lb)

Communication Switched Power Output

Maximum Output Current	750 mA
------------------------	--------

Current Drain

Average	250 mA (excludes defroster and IR LEDs)
Maximum Momentary Peak	400 mA
Defroster on	1.5 A
IR LEDs on	700 mA
Quiescent Off power mode	< 1 mA
Deep Sleep power mode	< 6 mA

Lens

Mount	C-type
IRIS	DC compatible
Focal Length	4.70 to 64.6 mm
Field of View (FOV)	4° to 67.3°
Zoom Ratio	18x

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

Media Capture (photo and video)

Photo or Video Capture Triggers	Two independent self timers, external trigger, motion detection, web page control
Programmable Still Image Resolutions	<ul style="list-style-type: none"> › 2592 x 1944 (JPEG) › 1280 x 960 (JPEG) › 1280 x 720 (JPEG) › 640 x 480 (JPEG) › 640 x 352 (JPEG) › 320 x 240 (JPEG) › 320 x 176 (JPEG)
Video	Capable of up to 720P for the following: <ul style="list-style-type: none"> › 1280 x 720 (MPEG4) › 640 x 480 (MJPEG) › 320 x 240 (MPEG4)
Video Frame Rate Options	30, 15, and 7.5 FPS (Frames Per Second)

Photo Capture Time

-NOTE-	<i>Capture time is from wake-up to start of capture.</i>
Fully On	< 1 s (5 MP images take longer.)
Partially On	10 s
Deep Sleep	15 s
Off State	90 s

Maximum Recommended Cable Length

Power & I/O Cable	20 m (65 ft)
Ethernet Cable	70 m (230 ft)

For comprehensive details, visit: www.campbellsci.eu/ccfc 



80 Hathern Road, Shepshed, LE12 9GX UK | +(0)1509 828888 | sale@campbellsci.co.uk | www.campbellsci.eu
 UK | AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | THAILAND | SOUTH AFRICA | SPAIN | USA

© 2019 Campbell Scientific, Ltd. | 02/05/2019