# PRODUCT DATASHEET

# Mini CX

FASTCAM series by Photron



# **Megapixel CMOS Sensor:**

1920 x 1400 pixels at 750fps 1920 x 1080 pixels at 1,000fps 1280 x 800 pixels at 2,000fps 1280 x 256 pixels at 5,000fps

# Class Leading Light Sensitivity:

ISO 5,000 color ISO 10,000 monochrome

#### **Global Electronic Shutter:**

4µs independent of frame rate

# Dynamic Range (ADC):

30-bit color 10-bit monochrome

### Compact and Lightweight:

75mm (H) x 75mm (W) x 123.5mm (D) 2.95" (H) x 2.95" (W) x 4.86" (D) Weight: 1.2Kg ( 2.6lbs.)

# **Internal Recording Memory:**

8GB

# **Fast Gigabit Ethernet Interface:**

Provides high-speed image download to standard notebook/PC

#### Video Out:

**HDMI Video Output** 

#### WiFi Connection:

Live view and camera set-up via wireless network (2.4GHz/5GHz, 802.11a/g/n).

# Removable Data Storage:

CFast Compact Flash drive for high-speed data transfer. Auto download to CFast media after recording is available.

#### **High-G Rated:**

Suitable for application in high-G environments; Operation tested to 150G, 11ms, 6-axes, 50 times

#### **Built-in Battery:**

Provides memory backup as well as 30 minutes of operational power.



# **COMPACT HIGH-SPEED CAMERA WITH HD IMAGE RESOLUTION**

Ideally suited for both on-board and off-board vehicle safety testing, the Mini CX delivers an exceptional combination of resolution, frame rate, light sensitivity and durability in a compact, stand-alone package.

With 1080 HD resolution at 1,000 frame per second and an industry leading light sensitivity of ISO 5,000 color and ISO 10,000 monochrome, the Mini CX provides outstanding image quality. Designed for the space limited locations and High-G operating environments common to automotive safety testing as well as certain military/defense applications, the Mini CX is Photron's smallest, lightest and – with operational testing to 150G – most rugged camera.

Additional features add to the usability of the Mini CX. For instance, HDMI video output allows easy local focusing of the camera. An internal battery offers 30 minutes of camera operation if the primary power source fails during a test. Rapid download to nonvolatile memory ensures protection for recorded images. A built-in accelerometer provides a backup trigger source.









## 1" C-mount Compatible Image Sensor:

The Mini CX uses an advanced CMOS image sensor that has been optimized for high light sensitivity and image quality.

A 6.6 micron pixel pitch provides a full resolution image sensor size of 12.7 x 7.12mm, with a diagonal of 14.6mm.

The Mini CX is compatible with lenses designed for both 1" C-mount and FX/DX SLR (with adapter) formats with no vignetting.

# **Junction Box Compatibility:**

The Mini CX is compatible with Photron's on-board high-G Junction Box for easy multi-camera workflow.

| Camera Performance Specifications |   |  |
|-----------------------------------|---|--|
| Model                             | Mini CX   |  |
| Full Frame Performance            | 750fps 1920 x 1400 pixels   |  |
| Example Frame Rates               | 1,000fps 1920 x 1080 pixels<br>2,000fps 1280 x 800 pixels<br>5,000fps 1280 x 256 pixels     |  |
| Minimum Exposure Time             | Global electronic shutter to 4µs selectable independent of frame rate                       |  |
| Dynamic Range (ADC)               | 10-bit monochrome 30-bit color  |  |
| Memory Capacity                   | 8GB   |  |
| Sensor Size / Pixel Size          | 12.7 x 7.12mm (diagonal 14.6mm), 1-inch C-mount compatible                                  |  |
| Built-in Battery                  | Operational power up to 30 minutes and memory back-up                                       |  |
| Input / Output                    | Input: Trigger (TTL/Switch), sync, ready, event Output: trigger, sync, ready, rec, exposure |  |
| Camera Control Interface          | High-speed Gigabit Ethernet / Wifi  |  |
| Video Out                         | HDMI  |  |
| Data Storage Media                | Removable CFast flash memory with auto download function                                    |  |
| Supported OS                      | Microsoft Windows operating systems including: 7, 8, 8.1, 10 (32/64-bit)                    |  |
|                                   |   |  |

#### **Mechanical and Environmental Specifications**

| Mechanical                          |  |
|-------------------------------------|--|
| Lens Mount                          | C-mount provided   |
| External Dimensions                 |  |
| Camera Body (excluding protrusions) | 75mm (H) x 75mm (W) x 123mm (D)<br>2.95" (H) x 2.95" (W) x 4.86" (D) |
| Weight                              |  |
| Camera Body                         | 1.2kg (2.6lbs)   |
| Environmental                       |  |
| Operating Temperature               | 0 to 40C, 32° to 104°F   |
| Storage Temperature                 | -20 to 60C, -4° to 140°F   |
| Humidity                            | 85% or less (non-condensing)   |
| Operational Shock                   | 150G, 11ms, 6-axes, 50 times   |

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