From Eye to Insight

Leica MICROSYSTEMS

# LEICA DFC9000 GT
# LEICA DFC9000 GTC

## sCMOS Microscope Camera


## GET CLOSER TO REALITY

Imagine you could image live cells as close as possible to their native state. Capture even faint fluorescent signal you currently miss. And discover what happens in the time between two subsequent images. Imagine you could get a better view of what really happens in cells!
The Leica DFC9000 will turn your imagination into reality. This monochrome microscope camera with newest scientific CMOS (sCMOS) sensor technology for fluorescence imaging enables you to image your cells under near-native conditions.

- Protect your cells with short exposure times
- Capture highly dynamic processes with high-speed acquisition
- Get more information in one image with large field of view

# SPECIFICATIONS

| | |
|---|---|
| **Camera type** | 4.2 MP sCMOS monochrome fluorescence camera |
| **Sensor** | Front-illuminated scientific CMOS CIS2020A from BAE |
| **Shutter** | Rolling shutter with global reset |
| **Pixel** | 2048 x 2048 (4.2 MP); 6.5 µm x 6.5 µm pixel size |
| **Sensor size** | 13.3 x 13.3 mm (~19 mm diagonal) |
| **Speed of acquisition*** | 50 fps (USB 3.0); >90 fps (Camera Link) |
| **Maximum quantum efficiency** | ~82% @ 580 nm |
| **Bit-depth** | 12 bit / 16 bit |
| **Cooling** | 0°C @ 27°C ambient, air-cooled |
| **Binning (hardware binning)** | 2x2, 3x3, 4x4, 8x8 |
| **Partial scan** | Freely definable region of interest (ROI), combination with binning possible |
| **Internal memory** | 1 GB |
| **Dark current** | ~ 0.14 $e^-$/px/sec |
| **Read noise** | 0.9 $e^-$ |
| **Dynamic range** | 1 : 33000 |
| **Pixel clocking rate** | 540 MHz / 216 MHz |
| **Supported operating systems** | Windows 7 and Windows 8 |
| **Software** | Leica Application Suite (LAS) X |
| **C-mount** | 1x for inverted and upright compound microscopes |
| **Interfaces** | USB 3.0 or Camera Link |
| **Camera package** | Camera package includes camera head, cables and PCIe board, LAS X DVD, and instructions for use |

* depends on software in use