

# High Power LED TILED OX



- Exchangeable lenses
- 12.000 lm white, color or NiR LED
- Pulsed or continuous
- Small size
- Down to 250 ns strobe

# WE BUILD THINGS THAT WORK THE WAY YOU WISH THEY WOULD.

MultiLed produts cover all applications of high speed cameras and many applications in the machine vision market. Some models e.g. cover sub microsecond exposure time, monochromatic light or give you enough light to fully close aperture at some microseconds exposure time. Designed from a decade of experience with thousands of customer projects in mind, MultiLed products offer ultra strong lighting at an affordable price.

### **MULTILED QX - KEY FEATURES**

The MultiLed QX is a standalone lamp head for continuous operation.

With the optional MultiLed GX8 controller connected between power supply and lamp head, you can access a lot more functionality:

- Preinstalled lens (horizontal x vertical): 12°x12°
- Additional lenses (horizontal x vertical): 25°x25° 40°x40° 60°x60° 30°x13° 60°x12°
- 12.000 Lumen
- Standard desktop power supply with 7 m cable included
- White, color and NiR LED models available. Additional colors available with CX model
- 150W 48V
- Continuous operation
- Bottom 1/4" standard thread for photographic accessories and mount
- Status LED
- Uses MULTILED GEN4 System cable

#### Advanced features when connected to MultiLed GX8 as power supply:

New GS Vitec "ultra high speed strobe" technology.

- Down to 170 nanoseconds strobe length at full output power
- Pulse delay: 290 ns (level mode); 700 ns +/- 20 ns (edge mode)
- Pulse rise time: 60 nsPulse fall time: 160 ns
- Shortest usable pulswidth: 170 ns
- Adjustable intensity for each channel: 1% to 100%
- Temperature and status display for each lamp head
- All communications and power supply come from the GX8 through 1 MULTILED GEN4 System cable

#### Scope of delivery:

• QX: Lamp head, desktop power supply, 7m cable, 12°x12° lens

• QX Plus: as QX, additional lenses: (horizontal x vertical): 25°x25° - 40°x40° - 60°x60° -

30°x13° - 60°x12°

• QX Set: 2-8 x QX lamp head, 1 x GX8 controller, power supply with 7m cable,

320 W (2 QX); 600 W (3-4 QX); 2 x 600 W (5-8 QX),

2 x 5m trigger cable, full lens sets of (horizontal x vertical):

25°x25° - 40°x40° - 60°x60° - 30°x13° - 60°x12° for each lamp head.



white

455 nm

530 nm 660 nm

810 nm

850 nm

940 nm



## **MULTILED QX - TECHNICAL DATA SHEET**

# **VALUE SERIES**

| MULTILED QX                         |   |  |
|-------------------------------------|---|--|
| Luminous flux                       | White, 12.000 lumen   |  |
| Power                               | 150 W   |  |
| Supply voltage                      | 48 Vdc  |  |
| Bundled PS                          | Desktop, 48 V, 160 W  |  |
| Connector                           | MULTILED GEN4 system  |  |
| Heat dissipation                    | Active, heatsink and 2 fans   |  |
| Einvironmental temp.<br>(operation) | -25°C - 40°C  |  |
| Temp. (Storage)                     | -25°C - 80°C  |  |
| Overtemperature protection          | Sensor onboard  |  |
| IP class                            | IP 20   |  |
| Mounting options                    | 1/4" thread   |  |
| Standard lenses                     | 12° FWHM, exchangeable  |  |
| Optional lenses (QX Plus)           | 25°x 25°, 40° x 40°, 60° x 60°, 30° x<br>13°, 60° x 12° (horizontal x vertical) |  |
| Dimensions                          | 78 * 104 * 64 mm  |  |
| Weight                              | 650 g   |  |
| Setup                               | MultiLED GX8 controller   |  |
| LED                                 | 12  |  |
| Housing                             | Aluminium   |  |
| Light modes                         | Continuous, level, timed  |  |
| Light intensity                     | Adjustable, 1%100%  |  |

| Timing with GX8    |                  |                  |  |  |  |
|--------------------|------------------|------------------|--|--|--|
|                    | QX white         | QX color         |  |  |  |
| Delay (level mode) | 290 ns           | 290 ns           |  |  |  |
| Delay (edge mode)  | 700 ns +/- 20 ns | 700 ns +/- 20 ns |  |  |  |
| Rise time          | 60 ns            | 25 ns            |  |  |  |
| Fall time          | 160 ns           | 15 ns            |  |  |  |
| Shortest usable    | 170 ns           | 100 ns           |  |  |  |

| ALTERNATIVE LED TYPES (STANDARD: COLD WHITE 12.000 lm)  |                    |                  |                 |  |
|---|--------------------|------------------|-----------------|--|
| Color   | Peak wavelenght nm | Luminous flux lm | Radiant flux mW |  |
| 95 CRI White  | Warm white         | 6.600            | -               |  |
| Blue  | 440 - 460          | -                | 46.200          |  |
| Green   | 520 - 540          | -                | 9.300           |  |
| Photo red   | 640 - 670          | -                | 30.200          |  |
| NiR 810 nm  | ~ 810              | -                | 25.100          |  |
| NiR 850 nm  | ~ 850              | -                | 22.500          |  |
| NiR 940 nm  | ~ 940              | -                | 24.800          |  |
| For other red wavelengths please see CX datasheet. For a more narrow wavelength selection, please contact us. |                    |                  |                 |  |

