

# X-Cite® Product Selection Guide

|                                       |  | X-Cite®<br>120 XL | X-Cite®<br>120 XL w/iris | X-Cite®<br>120PC XL | X-Cite®<br><i>exacte</i> |
|---------------------------------------|--|-------------------|--------------------------|---------------------|--------------------------|
| <b>Lamp</b>                           |  |                   |                          |                     |                          |
| Intelli-Lamp®                         | automatic hour tracking, temperature monitoring  | ○                 | ○                        | ○                   | ○                        |
| Pre-alignment                         | fast, easy, safe installation  | ○                 | ○                        | ○                   | ○                        |
| 2000 hour warranty                    | guaranteed long life   | ○                 | ○                        | ○                   | ○                        |
| Broad spectrum                        | excites wide range of fluorophores   | ○                 | ○                        | ○                   | ○                        |
| DC powered                            | improved stability   |                   |                          |                     | ○                        |
| <b>Stability</b>                      |  |                   |                          |                     |                          |
| Closed-Loop Feedback (CLF)            | compensates for changes in lamp output, provides stable output over days   |                   |                          |                     | ○                        |
| 0 - 20ms stability                    | ideal for high speed acquisitions, flash photolysis and other ultra-fast applications  |                   |                          |                     | ○                        |
| Milliseconds to seconds stability     | ideal for structured illumination, video rate acquisitions, tiling and other short-medium term applications                        | ○                 | ○                        | ○                   | ○                        |
| Seconds to hours stability            | ideal for general fluorescence assays and other medium term applications   | ○                 | ○                        | ○                   | ○                        |
| Hours to days stability               | ideal for cell culture time-lapse, comparative and quantitative studies over multiple time points and other long term applications |                   |                          |                     | ○                        |
| Measurable output                     | light guide compatible with X-Cite® Radiometer   | ○                 | ○                        | ○                   | ○                        |
| Calibrated output option              | absolute power reading in watts, provides repeatability  |                   |                          |                     | ○                        |
| <b>Illumination Uniformity</b>        |  |                   |                          |                     |                          |
| Microscope Adapter                    | compatibility with modern microscopes from all major manufacturers   | ○                 | ○                        | ○                   | ○                        |
| Liquid light guide                    | ensures homogeneity, allows isolation of microscope from heat and vibration  | ○                 | ○                        | ○                   | ○                        |
| <b>Intensity Adjustment</b>           |  |                   |                          |                     |                          |
| 5-step iris (100%, 50%, 25%, 12%, 0%) | limits photobleaching  |                   | ○                        | ○                   |                          |
| 100-step iris (1% increments)         | limits photobleaching with improved ability to optimize specimen illumination  |                   |                          |                     | ○                        |
| Shutter                               | turn illumination on/off without having to readjust iris constantly  |                   |                          | ○                   | ○                        |
| Shutter - high speed                  | high speed acquisition, critical exposures   |                   |                          |                     | ○                        |
| Band pass filter                      | removal of cell-damaging deep UV and IR wavelengths  |                   |                          |                     | ○                        |
| <b>Remote Control</b>                 |  |                   |                          |                     |                          |
| Foot Pedal                            | hands-free operation of shutter  |                   |                          | ○                   | ○                        |
| Graphical user interface (GUI)        | computer control of all functions, unit status information (including CLF)   |                   |                          | ○                   | ○                        |
| Open code for all functions           | easily adaptable to many software platforms  |                   |                          | ○                   | ○                        |
| RS-232 connector                      | standard communication port  |                   |                          | ○                   |                          |
| USB connector                         | easy to use with today's standard computers  |                   |                          |                     | ○                        |
| TTL                                   | high speed shutter activation  |                   |                          |                     | ○                        |
| <b>Safety</b>                         |  |                   |                          |                     |                          |
| Interlock switches                    | prevents unit from running with access panels open   | ○                 | ○                        | ○                   | ○                        |
| Light shields/shutter                 | automatic shielding of light when light guide is not inserted  | ○                 | ○                        | ○                   | ○                        |
| Light guide detection                 | ensures proper/complete insertion of light guide   |                   |                          |                     | ○                        |