

## Basic features of confocal microscopes at BIC

|   | Objectives   |  |  | Camera   | Lasers   | EPI Light source   | Parallel imaging, channels | Climate control | Stage inserts                          | Software                           | Special features  |
|---|--|--|--|--|--|--|----------------------------|-----------------|--|------------------------------------|---|
|   | Magnification/NA   | Working distance   | Filed of view  |  |  |  |                            |                 |  |                                    |   |
| <b>Leica Stellaris.5X (scanning)</b>                                      | 5x/0.15dry<br>10x/0.4dry<br>20x/0.75dry<br>20x/0.75glycerol<br>40x/1.25glycerol Corr<br>63x/1.4oil                 | 13.7 mm<br>2.56 mm<br>0.62 mm<br>0.66 mm<br>0.35 mm<br>0.14 mm           | 2320x2320um<br>1160x 1160um<br>582x582um<br>582x582um<br>291x291um<br>184x184um    | 8192x8192px,<br>8/12/16bit                                     | 405nm<br>448nm<br>485-790nm (tunable)  | LEDwhite   | up to 5                    | No              | Slides,<br>Dish35-<br>60mm             | LAS X                              | Lightning Module,<br>Lambda Scanning,<br>TauSense   |
| <b>Leica Stellaris.5LIA (scanning)</b>                                    | 5x/0.15dry<br>10x/0.3dry<br>20x/0.75dry<br>20x/0.7glycerol<br>63x/1.2water Corr<br>63x/1.4oil                      | 13.7 mm<br>11 mm<br>0.62 mm<br>0.26 mm<br>0.3 mm<br>0.14 mm              | 2320x2320um<br>1160x 1160um<br>582x582um<br>582x582um<br>184x184um<br>184x184um    | 8192x8192px,<br>8/12/16bit                                     | 405nm<br>488nm<br>561nm<br>640nm   | LEDwhite   | up to 3                    | No              | Slides,<br>Dish35-<br>60mm             | LAS X                              | Lightning Module,<br>Lambda Scanning  |
| <b>Zeiss LSM980-Airy (scanning)</b>                                       | 5x/0.17dry<br>10x/0.3dry<br>20x/0.8dry<br>40x/1.2water Corr<br>63x/1.4oil  | 18.5 mm<br>2.1 mm<br>0.55 mm<br>0.28 mm<br>0.19 mm                       | 1697x1697um<br>848x848um<br>424x424um<br>212x212um<br>135x135um                    | 8192x8192px<br>(Airy-<br>4096x4096px)<br>8/16bit               | 405nm<br>445nm<br>488nm<br>561nm<br>639nm  | LED385nm<br>LED475nm<br>LED555nm<br>LED630nm   | up to 11                   | No              | Slides,<br>Plates,<br>Dish35-<br>100mm | ZenBlue                            | AiryScan Module,<br>Lambda Scanning,<br>Online fingerprinting   |
| <b>Zeiss LSM900-Airy (scanning)</b>                                       | 5x/0.16dry<br>10x/0.45dry<br>20x/0.8 dry<br>40x/1.2water Corr<br>63x/1.4oil  | 12.1 mm<br>2.1 mm<br>0.55 mm<br>0.29 mm<br>0.19 mm                       | 1278x1278um<br>639x639um<br>320x320um<br>160x160um<br>101x101um                    | 6144x6144px<br>(Airy-<br>4096x4096px)<br>8/16bit               | 405nm<br>488nm<br>561nm<br>639nm   | LED385nm<br>LED475nm<br>LED555nm<br>LED630nm   | up to 3                    | No              | Slides,<br>Plates,<br>Dish35-<br>100mm | ZenBlue                            | AiryScan Module,<br>Lambda Scanning, DIC  |
| <b>Zeiss LSM800-Airy (scanning)</b>                                       | 5x/0.25dry<br>10x/0.3dry<br>20x/0.8dry<br>63x/1.2water Corr<br>63x/1.4oil  | 12.5 mm<br>5.2 mm<br>0.55 mm<br>0.28 mm<br>0.19 mm                       | 1278x1278um<br>639x639um<br>320x320um<br>101x101um<br>101x101um                    | 6144x6144px<br>(Airy-<br>4096x4096px)<br>8/16bit               | 405nm<br>488nm<br>561nm<br>640nm   | LEDwhite   | up to 3                    | No              | Slides,<br>Plates,<br>Dish35-<br>100mm | ZenBlue                            | AiryScan Module,<br>Lambda Scanning, DIC  |
| <b>Zeiss LSM800 (scanning)</b>  | 5x/0.25dry<br>10x/0.45dry<br>20x/0.8dry<br>40x/1.2water Corr<br>40x/1.3oil<br>63x/1.4oil                           | 12.5 mm<br>2.0 mm<br>0.55 mm<br>0.28 mm<br>0.21 mm<br>0.11 mm            | 1278x1278um<br>639x639um<br>320x320um<br>160x160um<br>160x160um<br>64x64um         | 6144x6144px,<br>8/16bit  | 405nm<br>488nm<br>561nm<br>640nm   | LEDwhite   | 1 or 2                     | No              | Slides,<br>Plates,<br>Dish35-<br>100mm | ZenBlue                            | Lambda Scanning, DIC  |
| <b>Evident FV4000 (scanning)</b>  | 2x/0.08 dry<br>10x/0.4 dry<br>20x/0.8 dry<br>30x/1.05 silicon<br>60x/1.3 silicon<br>60x/1.4 oil                    | 6.2 mm<br>3.1 mm<br>0.6 mm<br>0.8 mm<br>0.3 mm<br>0.13 mm                | 6363x6364um<br>1272x1272um<br>636x636um<br>424x424um<br>212x212um<br>212x212um     | Galvano-<br>4096x4096px,<br>Resonant-<br>1024x1024px,<br>16bit | 405nm<br>445nm<br>488nm<br>514nm<br>561nm<br>594nm<br>640nm<br>685nm<br>730nm<br>785nm | LED-LDP<br>367nm<br>407nm<br>436nm<br>470nm<br>550nm   | up to 6                    | Yes,<br>w CO2   | Slides,<br>Plates,<br>Dish35-<br>100mm | FluoView                           | Resonance scanner   |
| <b>Olympus_FV1000 (scanning)</b>  | 4x/0.16dry<br>10x/0.4dry<br>20x/0.75dry<br>40x/0.95dry Corr<br>60x 1.2water Corr<br>60x/1.35oil                    | 13 mm<br>3.1 mm<br>0.6 mm<br>0.18 mm<br>0.28 mm<br>0.15 mm               | 6625 x6625um<br>2650x2650um<br>1325 x1325um<br>663x663um<br>442x442um<br>442x442um | 2048x2048px<br>(single channel:<br>4096x4096px)<br>12 bit      | 405nm<br>473nm<br>559nm<br>635nm   | MetalHalide<br>(white)   | up to 3                    | No              | Slides,<br>Plates,<br>Dish35-<br>100mm | FV10-ASW                           | Resonance scanner,<br>DIC,<br>Stage not automated   |
| <b>Nikon CrEST.V3 (spinning disk)</b>                                     | 4x/0.2dry<br>10x/0.45dry<br>20x/0.8dry<br>20x/0.7dry Corr<br>25x1.05 sil Corr<br>60x/1.42oil                       | 20 mm<br>4 mm<br>0.8 mm<br>2.3 mm<br>0.55 mm<br>0.11 mm                  | 5311x5311um<br>2116x2116um<br>1056x1056um<br>1056x1056um<br>354x354um              | 2720x2720px,<br>8/12/16 bit                                    | 405nm<br>446nm<br>477nm<br>520nm<br>546nm<br>638nm<br>749nm                            | LED340nm<br>LED380nm<br>LED435nm<br>LED470nm<br>LED500nm<br>LED550nm<br>LED580nm<br>LED635nm | 1                          | Yes,<br>w CO2   | Slides,<br>Plates,<br>Dish35-<br>100mm | NIS<br>Elements                    | Nikon Jobs for<br>automatic imagin,;<br>widefield imaging (with<br>LEDs);<br>DIC  |
| <b>MolDevices ImageXpress HCS.ai (high content plates, spinning disk)</b> | 4x/0.2 dry<br>10x/0.45 dry<br>20x/0.45 dry Corr<br>20x/0.95 water Corr<br>40x/0.60 dry Corr<br>40x/1.15 water Corr | 20 mm<br>4 mm<br>8.2-6.9 mm<br>0.99-0.9 mm<br>3.6-2.8 mm<br>0.61-0.59 mm | 3757x3757um<br>1491x1491um<br>766x766um<br>766x766um<br>379x379um<br>379x379um     | 2304x2304px,<br>16bit  | 401nm<br>488nm<br>514nm<br>545nm<br>577nm<br>637nm<br>748nm                            | N/A  | 1                          | Yes,<br>w CO2   | Plates<br>only                         | MetaXpress<br>Acquire +<br>InCarta | Two spinning disks,<br>Auto-immersion water<br>objectives, Maginifier<br>1x /1,5x, InCarta AI<br>anaysis, Targeted<br>acquisition |