

# Gryphon, Crystal Gryphon, Gryphon LCP and Crystal Gryphon LCP

Modular Liquid Handling Systems



**Crystal Gryphon**



**Crystal Gryphon LCP**

	<b>Gryphon</b>	<b>Gryphon LCP</b>	<b>Crystal Gryphon</b>	<b>Crystal Gryphon LCP</b>
LCP Dispenser	Upgradeable	✓	Upgradeable	✓
Nano Dispenser	Upgradeable	Upgradeable	✓	✓
XY Stage	✓	✓	✓	✓
Wash Module	✓	✓	✓	✓
96 Head: 100 µl	✓	✓	✓	✓
24 Head: 100, 250 µl	Optional	Optional	Optional	Optional
348 Head: 100 µl	Optional	Optional	Optional	Optional
96 Head: 250, 500, 1000 µl	Optional	Optional	Optional	Optional

**“Gryphon” general features:**

- **No disposables, cutting operating costs**
- The “All-In-One” Microdispenser enables screen and protein drop-setting in one protocol
- Modular design allows for custom set-ups
- Set up sitting and hanging drop vapor diffusion crystallization experiments
- Set-up batch crystallization drops (under oil)
- Combines individual precipitant and protein solutions into crystallization trial wells
- X-Y stage with two plate positions and one wash station
- Low maintenance

**96 Syringe Head\*:**

- 96 flexible Nitinol needles (memory metal)
- Dispensing accurate 100 nl to 100 µl volume with a CV of less than 5 %
- Aspiration from different deep well blocks (e. g. 1 ml and 2 ml)
- Aspiration from reservoir wells into crystallization wells of one crystallization plate
- 96 head is suitable for further volume options such as 250 µl, 500 µl or 1000 µl
- For dispensing buffers and additives

\*= 24 Syringe Head and 384 Syringe Head are further options

### **Optional 24 syringe head:**

- Set-up of optimization plates
- Suitable for work with deep-well, 24- and 48-well plates

### **Compatibility with Plates:**

- Suitable for work with deep well, 96-, 384- and 1536-well plates
- Compatible with most crystallization plates with up to 5 crystallization wells and one reservoir well
- Common plates from several companies will be included in the software (ARI Intelli-Plates, Greiner, Swissci MRC, Corning, Molecular Dimension)
- Further plate definitions can be added in the software

### **Nano Protein Dispense Head (optional):**

- Non-contact nano dispenser for dispensing proteins
- Dispenses 50 nl up to 100 µl with a CV of less than 5 % (1-, 2- or 3-channels possible)
- Two options to aspirate/dispense: Air backed and liquid backed
- Sample recovery possible to minimize total consumption of protein solutions
- Suitable for work with 24-, 48-, 96-, 384- and 1536-well plates

### **LCP (Lipidic Cubic Phase) module (optional):**

- Seeding and for highly viscous samples
- Syringe based lipidic cubic phase, bicelle dispenser
- Lipidic sponge-phase screen for membrane proteins
- Integrated LCP mixing station
- Dispensing 25 nl of viscous solutions with a CV < 5%
- Quick change syringe design makes loading the syringe easy
- Self-aligning syringe needle eliminates the need for constant calibration
- Aspirate from 0.2 ml tubes with an optionally added longer needle
- 8 tube positions for seeding applications
- 96-well sandwich plate ready to seal in less than 2 minutes

### **Software:**

- "Easy-to-learn" and "easy-to-use" graphical interface
- Drag-and-drop protocol creation and real-time protocol validation
- Windows-based software
- Plates can be easily selected from the plate library, or new plates can be quickly defined

### **Specifications:**

- Dispense volumes:      96 Head:                      100 nl to 100 µl  
   Nano:                              50 nl to 100 µl  
   LCP:                                25 nl to 2 µl
- Size:                              Base (h x w x d):            51 cm x 59 cm x 59 cm, 31 kg  
   Wash (h x w x d):            15 cm x 17 cm x 36 cm, 3.5 kg  
   Nano (h x w x d):            24 cm x 15 cm x 41 cm, 8.4 kg
- Software:                        Windows 7/XP
- Prices:                              Upon request