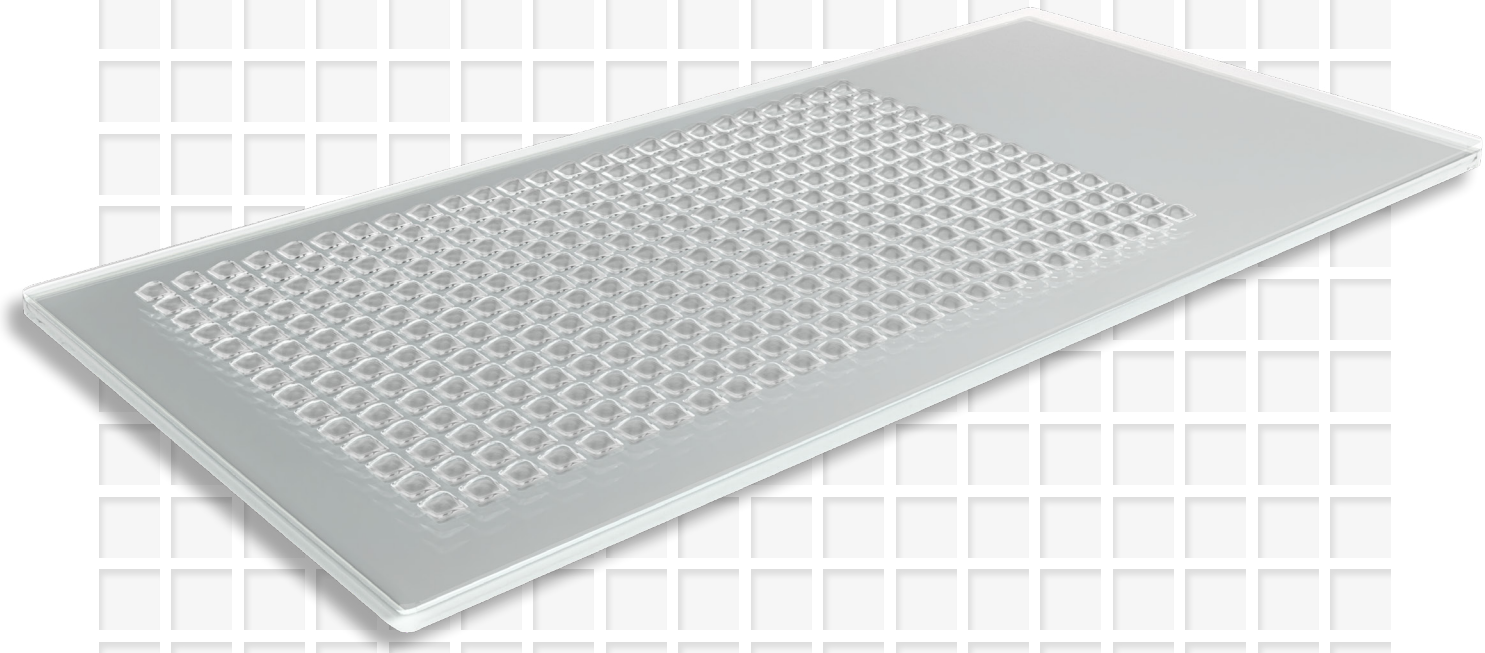
AQUARRAY



PRODUCT CATALOGUE 2021

DROPLET MICROARRAY (DMA)

Droplet Microarrays are transparent and completely planar arrays consisting of hydrophilic spots separated by super-hydrophobic areas based on AQUARRAY's patented technology.

Compatibility with cell culture models

- Adherent and suspension cell lines of any tissue and species
- Primary cells, iPSCs and stem cells
- 3D cell culture models (e.g., spheroids and scaffolds)

Compatibility with screening assays

- Compound screenings
- Transfection-based assays
- Microscopy & High Content Screening
- Fluorescent- and colorimetric-based assays
- Biochemical assays

Compatibility with standard laboratory instruments

- Cell incubators
- Light, fluorescence and confocal microscopes / scanners
- MALDI mass spectrometers
- Standard protocols for staining, fixation and immunofluorescence
- Non-contact dispensers for cells, compounds and reagents: BioDot, Biofluidix, CELLINK, Cytena Dispendix, Formulatrix, Gyger, LabCyte, Scienion
- ANSI/SLAS foot print

Compatibility with high-throughput chemistry

- Solid-phase and solution-based on-chip synthesis
- Combinatorial synthesis of e.g., small molecules
- De novo synthesis of drug libraries
- On-chip reaction monitoring by UV-Vis [1]
- High-sensitive compound characterization down to the attomole range per spot by standard characterization techniques (e.g., MALDI-TOF MS / IR spectroscopy)
- On-chip post-synthetic processing

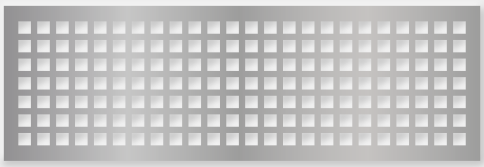
Droplet Microarray features

- High dense, transparent, planary wall-free array format without auto-fluorescence
- High throughput: 588-6040 spots per array of 25 mm x 76 mm format
- Custom array design possible
- Low cell numbers: 1-300 cells per spot [1]
- Compatible with low volume liquid handling (>5nL)

[1] depending on spot size

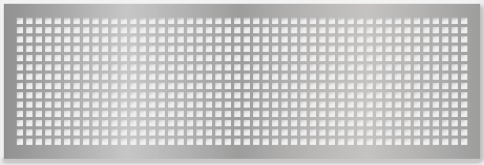
PLEASE BUILD THE CATALOGUE NUMBER OF THE DMA ACCORDING TO YOUR REQUIREMENTS		**I) Substrat Type + II) Surface Type + III) Pattern Number**	
SUBSTRATE TYPE		**SUFACE TYPE**	
Borosilicate glass: **G**	ITO-coated glass: **I**	Surface type: **np**	Surface type: **dd**
This substrate is used for standard chemical and biological work.	Conductive and IR-reflective properties of the additional indium-tin oxide (ITO) coating make AQUARRAY's Droplet Microarray compatible with applications such as on-chip MALDI-TOF mass spectrometry or IR spectroscopy.	A surface compatible with aqueous media	A surface compatible with both aqueous and organic solutions

101



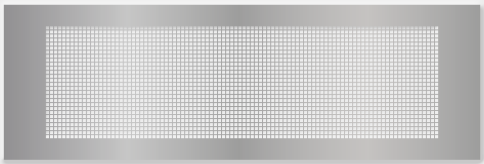
SQUARE . Hydrophilic spots: **7 x 24 = 168**
Spot dimensions: **2000 µm x 2000 µm** . Distance between spots: **1000 µm**
Distance between spot centers: **3000 µm**
Cat.No. G-np-101, G-dd-101, I-np-101, I-dd-101

102



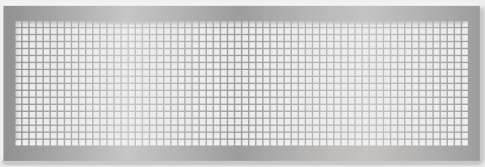
SQUARE . Hydrophilic spots: **14 x 48 = 672**
Spot dimensions: **1000 µm x 1000 µm** . Distance between spots: **500 µm**
Distance between spot centers: **1500 µm**
(Cat.No. G-np-102, G-dd-102, I-np-102, I-dd-102)

105



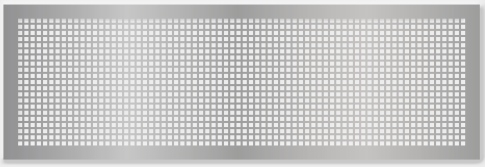
SQUARE . Hydrophilic spots: **96 x 28 = 2688**
Spot dimensions: **500 µm x 500 µm** . Distance between spots: **150 µm**
Distance between spot centers: **650 µm**
Cat.No. G-np-105, G-dd-105, I-np-105, I-dd-105

103



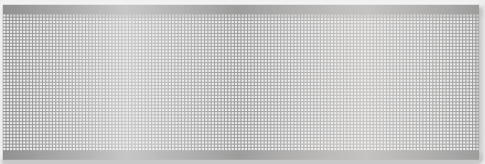
SQUARE . Hydrophilic spots: **18 x 64 = 1152**
Spot dimensions: **900 µm x 900 µm** . Distance between spots: 225 µm
Distance between spot centers: **1125 µm**
(Cat.No. G-np-103, G-dd-103, I-np-103, I-dd-103)

104



SQUARE . Hydrophilic spots: **21 x 72 = 1512**
Spot dimensions: **660 µm x 660 µm** . Distance between spots: **330 µm**
Distance between spot centers: **990 µm**
Cat.No. G-np-104, G-dd-104, I-np-104, I-dd-104

106

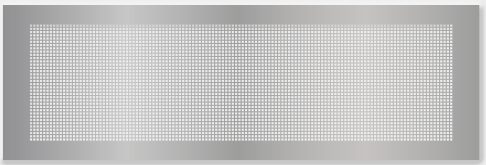


SQUARE . Hydrophilic spots: **144 x 42= 6048**
Spot dimensions: **350 µm x 350 µm** . Distance between spots: **175 µm**
Distance between spot centers: **525 µm**
Cat.No. G-np-106, G-dd-106, I-np-106, I-dd-106

Please contact us for customized functionalization, pattern size or shape.

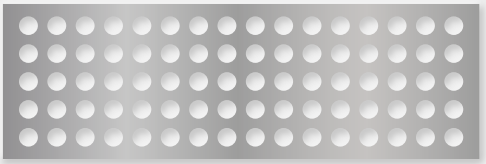
AQUARRAY

107



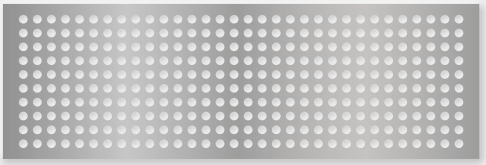
SQUARE . Hydrophilic spots: **36 x 128 = 4608**
Spot dimensions: **400 µm x 400 µm** . Distance between spots: **175 µm**
Distance between spot centers: **550 µm**
(Cat.No. G-np-107, G-dd-107, I-np-107, I-dd-107)

201



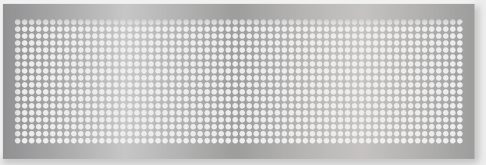
Circle . Hydrophilic spots: **5 x 16 = 80**
Spot dimensions: **3000 µm** . Distance between spots: **1500 µm**
Distance between spot centers: **4500 µm**
(Cat.No. G-np-201, G-dd-201, I-np-201, I-dd-201)

202



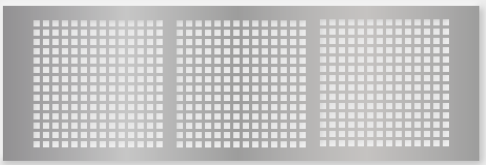
Circle . Hydrophilic spots: **10 x 32 = 320**
Spot dimensions: **1400 µm** . Distance between spots: **830 µm**
Distance between spot centers: **2230 µm**
(Cat.No. G-np-202, G-dd-202, I-np-202, I-dd-202)

203



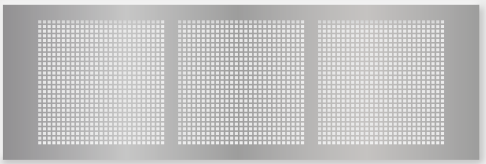
Circle . Hydrophilic spots: **18 x 64 = 1152**
Spot dimensions: **900 µm** . Distance between spots: **225 µm**
Distance between spot centers: **1125 µm**
(Cat.No. G-np-203, G-dd-203, I-np-203, I-dd-203)

301



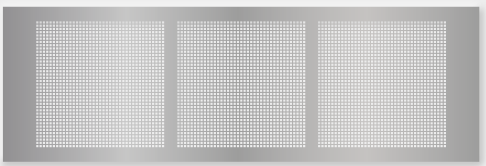
SQUARE . Hydrophilic spots: **1 field 14 x 14 = 196; 3 fields: 588**
Spot dimensions: **1000 µm x 1000 µm** . Distance between spots: **500 µm**
Distance between spot centers: **1500 µm**
(Cat.No. G-np-301, G-dd-301, I-np-301, I-dd-301)

302



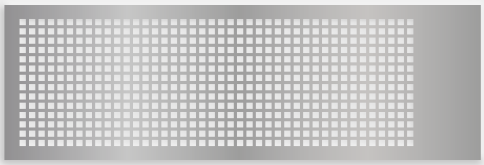
SQUARE . Hydrophilic spots: **1 field 27 x 27 = 729; 3 fields: 2187**
Spot dimensions: **500 µm x 500 µm** . Distance between spots: **250 µm**
Distance between spot centers: **750 µm**
(Cat.No. G-np-302, G-dd-302, I-np-302, I-dd-302)

303



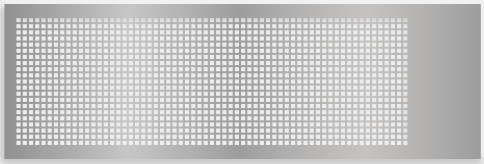
SQUARE . Hydrophilic spots: **1 field 39 x 39 = 1521; 3 fields: 4563**
Spot dimensions: **350 µm x 350 µm** . Distance between spots: **175 µm**
Distance between spot centers: **525 µm**
(Cat.No. G-np-303, G-dd-303, I-np-303, I-dd-303)

401



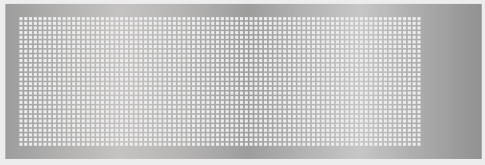
SQUARE . Hydrophilic spots: **14 x 42 = 588**
Spot dimensions: **1000 µm x 1000 µm** . Distance between spots: **500 µm**
Distance between spot centers: **1500 µm**
(Cat.No. G-np-401, G-dd-401, I-np-401, I-dd-401)

402



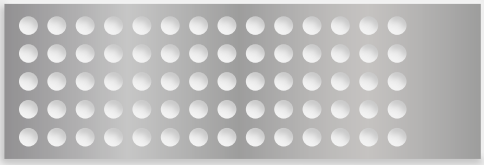
Square . Hydrophilic spots: **21 x 63= 1323**
Spot dimensions: **660 µm x 660 µm** . Distance between spots: **330 µm**
Distance between spot centers: **990 µm**
(Cat.No. G-np-402, G-dd-402, I-np-402, I-dd-402)

403



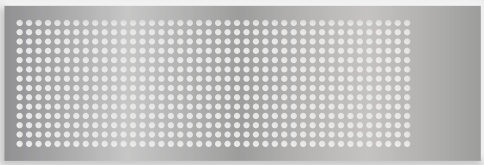
SQUARE . Hydrophilic spots: **28 x 84 = 2352**
Spot dimensions: **500 µm x 500 µm** . Distance between spots: **250 µm**
Distance between spot centers: **750 µm**
(Cat.No. G-np-403, G-dd-403, I-np-403, I-dd-403)

501



Circle . Hydrophilic spots: **5 x 14 = 70**
Spot dimensions: 3000 µm . Distance between spots: **1500 µm**
Distance between spot centers: **4500 µm**
(Cat.No. G-np-501, G-dd-501, I-np-501, I-dd-501)

502



Circle . Hydrophilic spots: **14 x 42 = 588**
Spot dimensions: **1000 µm** . Distance between spots: **500 µm**
Distance between spot centers: **1500 µm**
(Cat.No. G-np-502, G-dd-502, I-np-502, I-dd-502)

601

Borosilicate. NP hydrophilic blank **Cat.No G-np-601**
Borosilicate. DD omniphilic blank **Cat.No G-dd-601**
ITO. NP hydrophilic blank **Cat.No I-np-601**
ITO. DD omniphilic blank **Cat.No I-dd-601**

602

Borosilicate. NP hydrophobic blank **Cat.No G-np-602**
Borosilicate. DD omniphilic blank **Cat.No G-dd-602**
ITO. NP hydrophilic blank **Cat.No I-np-602**
ITO. DD omniphobic blank **Cat.No I-dd-602**

Please contact us for customized functionalization, pattern size or shape.

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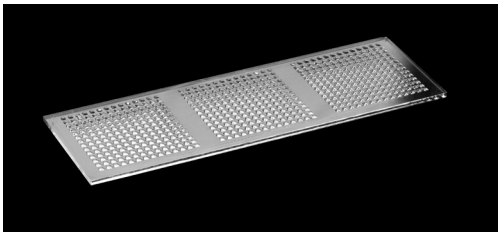
DMA Adaptor

Cat.No. AQP-005

For dipsensing on Droplet Microarray with liquid dispensers e.g. I-DOT One, I-DOT Mini, CERTUS FLEX.



Humidifying Pads

Cat.No. AQP-002

Used together with Humidifying Buffer to guarantee an optimal environment for cell culture on Droplet Microarray in the Petri dish.

Humidifying buffer

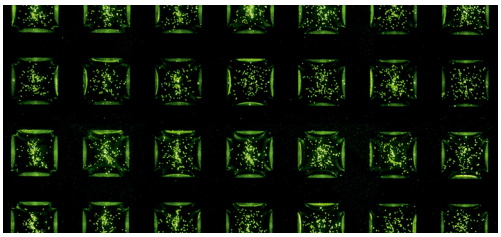
Cat.No. AQP-001

Optimized buffer for cell culture on Droplet Microarray.

Spheroid table

Cat.No. AQP-006

For inverted spheroid culture on Droplet Microarray in a Petri dish.



DMA-DISPENSER I-DOT Mini AQ edition

DMA-DISPENSER I-DOT Mini

Cat.No. AQG-001

Liquid dispenser for Droplet Microarray.

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