



Microdrop technology

Phileas[®] range overview and Airborne Surface Disinfection Market offer

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Phileas® range overview



Phileas® range overview (1/2)

	Phileas® 5 Integrated and mobile for very small volumes	Phileas® Genius A concentrate of technology	Phileas® MCD Custom made technology	Phileas® 25 Robustness without the weight	Phileas® One Volume & mobility	Phileas® 15 Robustness & mobility	Phileas® 75 Precision & mobility	Phileas® 250 Power & precision	Phileas® 285 Power & Volume
Treated volume	50 up to 1.000 L	0.5 up to 5 m ³	0.5 up to 5 m ³	1 up to 40 m ³	10 up to 165 m ^{3*}	10 up to 165 m ^{3*}	10 up to 165 m ^{3*}	50 up to 800 m ³	50 up to 1.000 m ³
Flowrate	420 mL/h	400 mL/h	400 mL/h	700 mL/h	1.2 L/h	1.2 L/h	1.2 L/h	3 L/h	4.2 L/h
Biocide tank volume	250 mL	250 mL	2 L	500 mL	2 L	2 L	2 L	10 L	2 x 10 L
Weight	7kg in total	7 kg	5,5 kg au total	5 kg	8 kg	11 kg	8 kg	17 kg	25 kg
Dimensions (l x w x h mm)	212 x 295 x 243	280 x 255 x 226	344 x 196 x 344	475 x 193 x 222	302 x 220 x 485	441 x 294 x 278	590 x 213 x 333	839 x 250 x 813	839 x 450 x 813
Multi-cycle		Up to 20 cycles	Up to 20 cycles	Up to 20 cycles	Up to 5 cycles	Up to 5 cycles	Up to 5 cycles	Up to 5 cycles	
Liquid inlet error notification**		✓	✓	✓	✓	✓	✓	✓	✓
Scale and liquid quantity check***							✓	✓	

* according to the calculation: biocide tank capacity 2L / dosis 12mL/m³ (Marketing Authorisation)

** error message if there is no biocide: "liquid inlet error"

*** error message if there is not enough biocide (weighed) compared to the theoretical necessary quantity for the launched program

Phileas® range overview (2/2)

	Phileas® 5 Integrated and mobile for very small volumes	Phileas® Genius A concentrate of technology	Phileas® MCD Custom made technology	Phileas® 25 Robustness without the weight	Phileas® One Volume & mobility	Phileas® 15 Robustness & mobility	Phileas® 75 Precision & mobility	Phileas® 250 Power & precision	Phileas® 285 Power & Volume
Traceability MyPhileas® app		✓	✓	✓	✓	✓	✓	✓	✓
Power source	On mains power	Supplied with battery (1hr20 autonomy) and charger	On mains power	On mains power, battery optional (2hr30 autonomy)	On mains power	On battery (2hr autonomy, rechargeable separately), double battery possible	On mains power	On mains power	On mains power
Power consumption	20 W	45 W	25 W	30 W	60 W	70 W	60 W	120 W	120 W
Additional comment	2 orientable nozzles	3 positions for use		The ideal demo machine!		Initially designed for wine tanks, it is also ideal for airlocks with no power source inside	Devea's best seller...	Ideal to treat several rooms or a corridor	Full stainless steel, two biocide canisters, two heads: fit for easy and extensive use!

Airborne Surface Disinfection market – main players and offer



Airborne Surface Disinfection: different techniques

	Vapor	Venturi	Centrifugation
Process	3 phases (vapor / liquid / vapor)	2 phases (liquid / vapor)	2 phases (liquid / vapor)
Biocide	Pure H ₂ O ₂	Pure H ₂ O ₂ or H ₂ O ₂ + peracetic ac. or H ₂ O ₂ + Ag ions	Pur H ₂ O ₂ ou H ₂ O ₂ + peracetic ac.
- [Biocide] Concentration	30-35% (or even 59%)	5-6% to 21%	7,4%
- Biocide temperature	55°C	Room temperature	Room temperature
Room conditions (T°C, %hr)	Necessary humidification (additional step)	No specific condition (except Solidfog)	No specific condition
Treated volume	10 up to 500 m ³	10 up to 500 m ³	0.5 up to 1000 m ³
Droplet size	<1 µm	5-25 µm	5-10 µm
Room Preparation	Vapor seal door and windows	No specific preparation of the room to be treated	No specific preparation of the room to be treated
Device positioning	Fixed or mobile (at the center of the space)	No too close to a wall – diffusion angle 45°	At the centre of the space or integrated
Additional ventilators	Yes	Not necessary	Not necessary
Aeration time post contact time	>3-6 hrs (depending on volume & HVAC)	1-2 hr (depending on volume & HVAC)	1-2 hr (depending on volume & HVAC)
Risk of corrosion	Yes – high	Yes / No – low	No
Competence level of the operators	Specific training, high technicity, trained technicians	Fast training – no specific competence	Fast training – no specific competence
Market players	Steris, Bioquell	Mobiwatch, Airinspace, Solidfog, Oxypharm, DIOP...	Devea
Cost	+++	+ to ++	++

Airborne Surface Disinfection: main market players

	Devea	Steris	Bioquell	Solidfog	Airinspace	Mobiwatch	Oxypharm	Anios	DIOP
Diffusion device	Phileas® Range	VHP	Bioquell Protec, SeQure, L4	Dosymist	Rhea (Compact, Titan)	Minibio / Maxibio	Nocospray	Aerosept	Diosol generator
Fixed or mobile	Fixed or mobile	Fixed or mobile	Fixed or mobile	Fixed or mobile	Mobile	Mobile	Fixed or mobile	Mobile	Mobile
H2O2 biocide	O2SAFE® 7.4% & PHILEASAFE 7.3% + perac. ac.	Vaprox (35% H ₂ O ₂)	BQ783	H ₂ O ₂ at 12%	X-Cid H ₂ O ₂ + peracetic acid	Mobiwatch SPP (7.4% H ₂ O ₂ + peracetic ac.)	Nocolyse (H ₂ O ₂ 6% + Ag ⁺)	Aseptanios (peracetic base + H ₂ O ₂)	Diosol (pure H ₂ O ₂ or H ₂ O ₂ + Ag)
Recommended dosis and conditions	12 mL/m ³	9 g/m ³ (at 35%) - 10-60% resid. hum	8 g/m ³ (at 35%) – range of hr	Not specified - 40% HR and 20°C	Not specified	Not specified	Certification tests performed with 2x5mL/m ³	7 mL/m ³ – 55°C	4 mL/m ³
Expertise in ASD	100% of its business	10% of its business?	100% of its business	100% of its business	50% of its business?	75% of its business	60% of its business?	1% of its business	100% of its business
Market Authorisation	Yes	Yes	No	No	No	No	No	No	No
Absence of liquid notification	Notification if no biocide / not enough biocide	Yes	Yes	Autocheck at cycle launch	-	-	-	Leftover quantity in the canister calculated	-
Data traceability	MyPhileas®: remote management + complete report	Yes, printer and USB optional	Yes, printer optional	End of cycle pdf conformity report OR on HMI / connection to central system	Rhea Titan: integrated printer, tag NFC	-	“Traceability system”	Data retrieval by USB port	-
Connectivity to the centralized system	Optional – doors, HVAC control...	Yes	Yes	Optional	-	-	-	-	-
Multi-cycle	5 up to 20 cycles	-	-	-	-	-	-	-	-

Why choosing Devea?

The MicroDrop Technology by Devea

- ✓ **Marketing Autorisation** (AMM FR-2019-071) -> proved efficacy, validated results by an independant authority
- ✓ Simple and robust technology, easy maintenance, no risk of corrosion
- ✓ No specific preparation of the room to be treated needed, no additional fans, intuitive and easy device positioning
- ✓ Non wetting fog, non corrosive treatment

The Phileas® range

- ✓ **Multi-cycles** -> elimination of the most difficult micro organisms (up to 6- \log_{10}), without being wet
- ✓ Absence of liquid notification (security), low liquid notification (for models with integrated scale)
- ✓ Residue-free biocide and no hazardous transport classification
- ✓ Connection to the automation and centralized system (Phileas® 75 & 250)
- ✓ Contact and aeration time optimised
- ✓ Dedicated solutions for small volumes; development of mobile then integrated solutions (Phileas® 5 & MCD)

Devea and Devea Services

- ✓ Expertise in centrifugation, ASD and clean room environnement in the industry
- ✓ Main market: pharma industry, with recurring clients -> confidence of the most demanding users (6- \log_{10} routinely reached)
- ✓ MyPhileas®: easy traceability and remote monitoring
- ✓ Devea Services:
 - ✓ Service provision
 - ✓ Personalised advice and support
 - ✓ Preventive maintenance, reactive After Sale