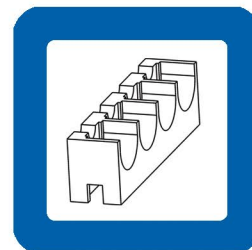


THERMAL VALIDATION SYSTEMS
for the Pharmaceutical / Biotechnology Industry

Data Logger - 90°C to +140°C

XpertLog® GMP



XpertLog® GMP simplifies and makes the thermal validation process more efficient:

- High efficiency: easy to program and install, pre-calibration not needed
- High reliability: no data loss during validation process
- High accuracy: ±0.1 °C from -90°C to 140 °C
- Data integrity: FDA 21 CFR Part 11

- + Network ready: multiple users may simultaneously share the same database
- + Remote factory calibration on users site

Technical Specifications:

Suitable applications:

- Autoclaves / SIP
- Sterilization tunnels
- Freeze-dryers (lyo cabinets)
- Cold room / ICH stability rooms
- Ovens / Freezers / Refrigerators
- Incubators / Warehouses, etc...

Logger type	Temperature	Humidity & Temperature	Pressure & Temperature
Sensor element	4 wires PT-100	capacitive 4 wires PT-100	absolute pressure 4 wires PT-100
- flexible	- PTFE / SS 19" (480 mm)	- 1" (25 mm)	- 1" (25 mm)
- rigid	- 1" (25 mm) / 6" (150 mm)	- 19" (480 mm)	- 19" (480 mm)
- customized	- up to 39" (1000 mm)		
Operating range			
- standard:	-90 °C to +140 °C	0 to 100 % RH non condensing	0.01 to 5 bar abs.
- extended:	-90 °C to +350 °C *	-40 °C to 100 °C	-40 °C to 140 °C
Accuracy	±0.1 °C from -90 to 140°C	±2.0 % RH, 0% to 100% non condensing at 20 to 45°C **	±10 mbar @ 0.01; 1 & 2 bar abs.
Memory capacity	32,000 data points	±0.1 °C from -40 °C to 100 °C	±0.1 °C from - 40 to 140°C
Sampling rate	1 sec to 24 hours	16,000 rh / 16,000 temp.	16,000 p / 16,000 temp.
Internal clock drift	4 sec / 24 h @ 23 °C	1 sec to 24 hours	1 sec to 24 hours
Mechanical		4 sec / 24 h @ 23 °C	4 sec / 24 h @ 23 °C
Material	Peek 1000 - FDA compliant	Peek 1000 - FDA compliant	Peek 1000 - FDA compliant
Enclosure	IP-68	IP-51 & IP-68	IP-68
Weight	44 g	43 g	77 g
Diameter	40 mm	40 mm	40 mm
Height	50 mm	60 mm	96 mm
Power	Lithium batteries: user replaceable		
Battery lifetime	Up to 12 months: based on usage		
Docking station	USB to computer: 4, 8, 12 and 20 ports available	programs and reads unlimited numbers of loggers	
Calibrations	Factory: traceable NIST / COFRAC - ITS-90 coefficients stored in the internal memory		
Certification	User: close loop calibration, using XpertLog® software		
	FMC: EN 60601-1-2 / 2007		
	Health Safety: EN 60950-1/2006		

* With thermal shield;

** Custom points available at request

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XpertLog® GMP
Available Models



GMPL
Temperature data logger with customizable rigid sensor



GMPF
Temperature data logger with flexible sensor



GMPF LP
Low profile temperature logger



GMP WM
Temperature logger with protected sensor for stopper washers and sterilizers



GMPF P
Pressure and temperature logger with flexible temperature sensor



GMPF RH
Humidity and temperature logger with flexible temperature sensor



GDPF BF
Temperature logger with buffer and flexible sensor



GDP RH
Humidity and temperature logger