



FLWPA

Thermal Validation & Mapping Systems



Accuracy & Reliability in Thermal Mapping



Technical Specifications:

Loggers :	Temperature Pressure Humidity	PT-100, 4 wires High accuracy : 0 to 5 bar abs Capacity
Range : & accuracy	- Temperature - Pressure - Humidity	-60 to +140°C (continuously) ± 0.1°C -110 to 350°C (shield) ± 0.1°C 0 to 5 bar absolute ± 5 mbar 20 to 90 %RH ± 2 %RH
Material :		Ketron Peek –FDA compliant
Battery		Lithium, user replaceable
Leak free		IP-68
Data collection interval		1 second to 24 hours
Memory		16 000 data points
Internal watch accuracy		< 1 second / month
Weight		35, 40 or 70 g (battery included)
Calibration		COFRAC / NIST traceable ITS-90 coefficients included

Docking Station :

- High speed communication
- Customizable : 4, 8, 12
- Reduced dimensions
- Simultaneously programming of unlimited number of loggers



Applications:

- Autoclaves
- Freeze dryer
- Ovens / Stability chambers
- Freezers, Refrigerators
- Cold rooms
- Sterilization tunnels
- Depyrogenation oven ...



XpertVal



FLWPA



XpertVal 21 channels

XpertVal was designed for simplifying validation jobs versus the existing validation systems; In compliance with FDA and European regulation, this system uses the most recent technology and the most powerful software enhancements. Reports are generated automatically and data integrity complies with FDA 21 CFR Part 11



XpertVal 60 channels

Technical Specifications :

Regulations	-FDA -EN285 -EN 554 -NFX 15 140 -FDA 21 CFR part 11
Total system accuracy	Better then 0,20°C (after thermocouples calibration) - close loop calibration
Number of channels	
XpertVal FL XpertVal HP	21 channels 60 channels
Standalone mode	The loggers can be programmed for working with or without computer
Reports	-Generated automatically -Customizable
Sensors	-Thermocouples (T, K, J ...) -RTD (PT 100) -4-20 mA -0-10 VDC ...
Memory	
XpertVal FL XpertVal HP	PCMCIA memory card up to 4 MB 10 000 internal data points

Advantages:

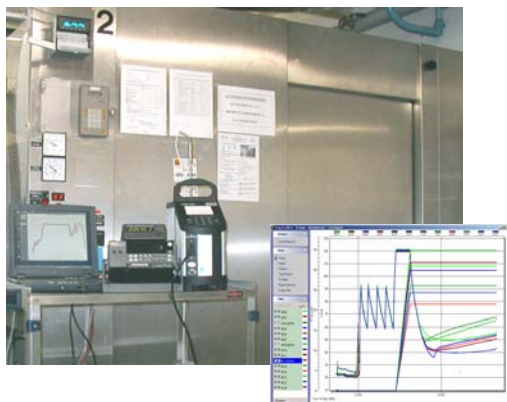
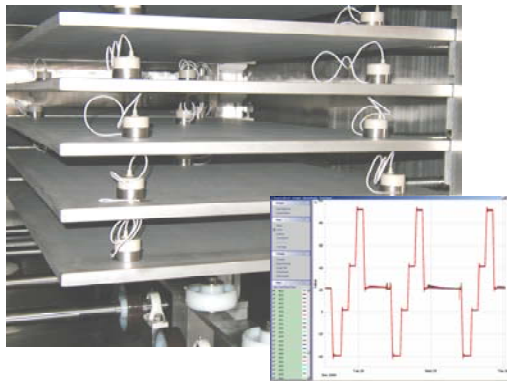
- Reduced dimensions
- User friendly software
- Automated reports
- Automatic calibration

Applications :

- Autoclaves
- Freeze dryer
- Ovens / Stability chambers
- Freezers, Refrigerators
- Cold rooms
- Sterilization tunnels
- Etc.



Lives' Software: total validation solution, yet user friendly...

CHARACTERISTICS	
<p>XpertLog & XpertVal Software Advantages</p>	<p>Applications</p>
<p>Intuitive and user friendly – cut training time in half</p> <p>Secured access, ID of equipment, Traceable</p> <p>Electronic signatures</p> <p>Close loop verification/calibration (several points automatically.</p> <p>Driven by the software, performed by the user</p> <p>Protected raw data and test reports</p> <p>Report:</p> <ul style="list-style-type: none"> • Customized • Generated automatically • Different programming possible for the same cycle • Unlimited number of loggers <p>(XpertLog)</p> <p>User customizable calculations</p> <p>Multilanguage</p> <p>Comply with all regulations:</p> <ul style="list-style-type: none"> • EN – 554 • EN – 285 • HTM – 2010 • CGMP • 21 CFR part 11 • Etc. 	<p style="text-align: center;">Autoclaves</p>  <p style="text-align: center;">Freeze Dryers</p> 



- Software Validation Manual
- IQ & OQ SOP



About FLW of PA, Inc:

FLW of PA, Inc. has been supplying thermal validation, mapping, and monitoring systems to the food and pharmaceutical industries since 1975.

We provide one stop shopping for all your validation needs, including thermocouple probes, sensors, feedthroughs, NIST traceable calibration services, and rental services.

References:

- Pfizer
- MSD
- LFB
- BMS
- Innothera
- Usifroid
- Astra
- Serono - France
- Transgene
- Lab Assistance
- Ciba Vision
- Hydrex
- Sofresid
- Trinity Biotech
- Merck - Biosterile
- Merck Mexico
- Hikma -Jordan
- Validapro
- Weleda
- Assystem
- Techniserv
- Abbott
- Sanofi Aventis
- Merck Santé
- Organon
- Septodont
- GSK
- Ingerop
- Serono Suisse
- Biomérieux
- Delpharm
- Axcell Technologies
- Adour Bio Conseil
- MCC
- Human Genome
- Merck MRL
- Hikma - Portugal
- Leo Laboratories
- Pierre Fabre
- Weleda
- Confarma
- Pharma Frontier Korea

