Welcome to QLab Stability Chamber

Throughly testing products prior to the customer use is vital to the success of your business.

Stability testing is an important part of drug, food & drink, cosmetic, polymer and other products evaluation and provides evidence of how the quality of a substance varies under a variety of environmental conditions.

Stringent requirements of stability testing demand a purpose designed chamber combining assured performance with minimal maintenance.

To achieve this, QLab develop and produce the chamber with new design, which the exterior and interior are made of stainless steel for better construction and easier maintenance.

The Only Manufacturer in Indonesia

QLab Kinarya Sentosa was established in 2002.

QLab manufactures products to a variety of temperature and humidity levels, offers a complete and comprehensive way to improve product quality testing.

We have been focus on the most secure and most reliable stability test chamber technology since established.

QLab is the only Indonesian company manufacturing humidity and/or temperature controlled equipments that use Intelligent Control System for excellence distribution performance.

As a series manufacturer, we carry out all stages of production in our own factory in Jakarta and can therefore guarantee you consistent durability and quality.

With more standard features and better performance capabilities than comparable chamber in Indonesian market, QL-Series, prominent series chamber from QLab improve product through dynamic testing solution

We concern to use the best air handling system for excellence distribution performance, and software complies with 21 CFR Part 11, so all requirements of documentation and data archiving are perfectly fulfilled.

Features

- Exterior; Stainless steel , designed to protect from shock and rust
- Interior; Stainless steel 304, 0.8 thickness
- Rack; Stainless steel with rod 6 mm diameter for frame and 4 mm for shelves
- Variety of capacity option : 300, 500, 1365 and 2140 liter
- Wide range of temperature/humidity application : 20°C - 45°C (± 2°C)/ 50 – 85%rH (± 5%rH) or other application
- Software fully comply to FDA CFR 21 Part 11 and GAMP5, Features : data-logging, data storage, calculation of various humidity parameters, graphic functions
- RJ45 (Ethernet) communication
- Better Logging System : Online and Offline logging, completed with Internal memory 128 MB (saves 47,000 data records per MB card storage capacity)
- Uninteruptible Logging for better documentation ; logging back up if power failure and logging back up if PC failure
- Testing products safety device for overshoot temperature and electrical parts protection
- Central Alarm System for alerting : when Safety device is working, humidity/temperature value is out of range and low water feeding failure
- Networkable Monitoring via RS485 serial communications with regular QLab Stability Test Chamber and other instrument up to 64 units
- Qualification Document: IQ, OQ and PQ

QL-series second generation chambers are completed with Central Alarm System which will alert the User when occurred out of range of humidity & temperature value, low water feeding failure and when safety device is working.

Intelligent Control System

- It controls the work of stability chamber devices.
- Consumption of electricity will be managed just to achieve the required temperature and relative humidity.
- This system will keep in stabile condition, or the fluctuation of temperature and relative humidity is very smooth.

Custom Solution

Can't find an QL-Series chamber to match your exact testing requiremnt or to meet special performance requiremnts.?

QLab is proud to offer a fully customizable test chambers for you

We want you to get the chamber on the right size, design, specification and configuration that truly optimize your test resources, processes and goals.

We will happily work around your current situation to ensure your testing chamber is as efficient and effective as possible. And for sure, it lies within your budget as well.

We really care to listen and understand what you need before offering advice on which solution could be most suitable for your requirement.

All our products we supply are installed, tested and commissioned on site by our own fully trained technicians - all you need to do is open the door of the rooms and put your products in.

You will get the same thoughtful care and attention from us which ever customed size and configuration you choose.

Benefits of using Intelligent control system :

- Temperature and humidity stability can be reached quickly and can be maintained at stabile condition
- Low consumption of energy
- Good distribution of condition due to low fluctuation .

Additional Optional Feature

- A door lock prevents the chamber open from opening during the test
- Shelves increase product loading capacity, allowing for more effective use of testing space
- An extended warranty is available on the part and/or labor of your equipmenmt
- Maintenance service contract and calibration aggrement help to keep equipment in optimum condition, minimizing chamber downtime

QL-Series Chamber Advantages

- Using heating element humidification system, steam injection, all types of water feeding (low low conductivity water 30 - 200 μS is recommended)
- Using Switzerland Intelligent Control System to achieve excellent distribution performance (homogeneous and stabile) and energy consumption efficiency
- Optimized air flow . Air flow is designed to evenly distribute air directly over the product. Direct airflow ensures the entire product is conditioned quickly
- Using better refregeration package with refregerant R-410a (non -CFC)
- Better Documentation with Uninterruptible Logging by a big capacity data logger completed with flash card memory of 128 MB. Available logging back up if power failure and if PC failure
- Probe/sensor of room could be calibrated and adjusted with calibrator or multiple calibration with standard solution
- Using advanced technology instruments with multi probes for some different points on distribution test; fast and perfect result
- Loop validation
  - *Use simulator probe to verify both the digital and analog signal transmission*
  - *Whenever the humidity and/or temperature signal is set to a fixed value, this is reported on the HW4 main screen (Current Values tab)*
- Networkable Via RS-485 for monitoring and integrating up to 64 instruments (max cable 1000 m length), easier to monitor individual data, alarm and logging system
- **More cost-effective for both unit and its operational**

On-site Calibration

Calibration and adjustment of the stability chamber probe can be directly done on the sensor. Multiple points calibration can be chosen to have precise measurement.

We calibrate your probes by the following methods:

- ROTRONIC calibration device and SCS-certified humidity standards
- SCS-certified reference probes (reference measurement)

rotronic

COMPLIANCE DECLARATION

DV04-30.787.01-1

for

Software

HW4 version 1.2.1.14714

physical devices

HygroLogNT: firmware release 1.2

HygroFlex, HygroLab, HygroPlam, HygroMid: firmware release 4.0

We attest that the validated version of the rotronic HW4 software and associated devices fulfill the requirements defined in the rotronic *ERES White Paper*, version 1.0, based on the following paragraphs:

21 CFR Part 11

21 CFR 110

21 CFR 210-211

EU Annex 11

validated by ROTRONIC Instrument Corp.

Inspected by Kereon AG,

December 2005

The HW4 software and devices have been reviewed against the specifications and the *ERES White Paper*, version 1.0, in order to provide evidence that the above mentioned regulations are fulfilled accordingly.

The measuring devices and the software have been validated and verified against the specifications provided by the manufacturer.

Inspected by Yves Samson, Kereon AG

Date/signature

Accepted by the manufacturer Daniel Ritter, ROTRONIC AG

Date /signature

Service and Support

QLab technician are available to assist with your equipment star-up, after-delivery-service, operation, troubleshooting, repair and preventive maintenace and calibration aggrements

No matter what your service needs are, our technician are ready to help you over the phone or in person

QLab understands how important test chamber reliability and dependable hardware are for your test processes and overall project time.

Even the shortest period of unintended downtime can cause major setbacks, big delays and result in missed revenue.

Our Committment

We are committed to being there for you throughout the operational lifetime of your stability chamber by providing:

- Well trained manufacture technicians; to solve all stability test room problems
- Fast support and one day service (inner city customer), and ASAP departure subject to air/land ticket availability (outer city customer)
- Weekday and weekend availability for any unexpected emergencies
- All parts are in stock and ready for immediate delivery to maintain your test room in optimum condition
- Best price of qualified/branded parts (OEM price condition)

Warranty

QLab warrants our products to be free from defects in material and workmanship, provided the same is installed, maintained and operated in accordance with the instruction manual.

The electrical and mechanical parts are covered against any failure which may happened as long as all specified working conditions of the considered equipment have been thoroughly followed.

This period of warrantee is of 12 months from date of installation.

Specification

Series		**QL 2102.2 SSiC**
Volume	liter	2140
Interior dimension		
Width	mm	2040
Height	mm	1400
Depth	mm	750
Exterior dimension		
Width	mm	2140
Height (with roller)	mm	2020 (2120)
Depth (with handle)	mm	1070 (1150)
Shelves (standard/max)	number	6/18
Electrical supply (± 10%) 50/60 Hz	V	230
Unit nominal power	W	3200
Doors	number	3
Type of doors		Compression door lock
Access port for probe calibration and mapping		Yes
Cooling system protection from power shock		Delay on
Refrigerant for cooling system		R-134a (Non - CFC)
Humidification system		Steam blow system by individual/separated blower with conductance value of water feeding is 10 - 100µS (recommended)
Material		Polished stainless steel SUS 304
Probe/sensor accuracy		±0.8 %RH, ±0.1 K at 10…30 °C
Long-term stability, humidity sensor		<1%RH, 0.1°C / year
Validation of analog and digital transmission (loop validation)		Enable
Temperature range without humidity (at room temp. 30 °C)	°C	+10 – 60
Temperature fluctuation when cooling is operated Temperature variation with humidity	≤ ± °C ≤ ± °C	0.3 1.0
Humidity range	%RH	30 – 90
Humidity fluctuation with temperature Humidity variation with temperature	≤ ± %RH ≤ ± %RH	2.0 3.0
Recovery time after 30 seconds for 1 door open at 25°C/ 60%RH	minutes	10
Recovery time after 60 seconds for 1 door open at 25°C/ 60%RH	minutes	15
Controller		Intelligent Control System
Off-line logging power back-up		External battery
Sensor type		Pt 100 class A (temperature), Rotronic HYGROMER® IN-1 (humidity)
Sensor and display resolution for temp. and humidity		0.01
Sensor calibration and adjustment :		
- 1-point or multi-point humidity calibration or adjustment		Yes
- 1-point or 2-point temperature calibration or adjustment		Yes
Setting, Logging and Monitoring		By external PC (exclude) and individual LCD display on chamber
Software		Fully comply to FDA CFR 21 Part 11 and GAMP5 with features : data-logging, data storage, calculation of various humidity parameters, graphic functions
Port data access		RJ45 (Ethernet)
Network		Networkable via RS485 up to 64 units
Alarm		Central Alarm System
Logging method		On-line and Off-line logging
Memory capacity		512 MB (saves 47,000 data records per MB card storage capacity)
Safety/Protection		
Overshoot temperature safety device		Cut off the main power and completed with output
Low level water protection		Cut off the heating element of humidification system

Custom specifications and configurations are available, please contact us.

Specification

Series		**QL1102.2SS iC**
Volume	liter	1365
Interior dimension		
Width	mm	1700
Height	mm	1350
Depth	mm	595
Exterior dimension		
Width	mm	1780
Height (with roller)	mm	1970 (2070)
Depth (with handle)	mm	850 (930)
Shelves (standard/max)	number	6/18
Electrical supply (± 10%) 50/60 Hz	V	230
Unit nominal power	W	2700
Doors	number	3
Type of doors		Compression door lock
Access port for probe calibration and mapping		Yes
Cooling system protection from power shock		Delay on
Refrigerant for cooling system		R-134a (Non - CFC)
Humidification system		Steam blow system by individual/separated blower with conductance value of water feeding is 10 - 100µS (recommended)
Material		Polished stainless steel SUS 304
Probe/sensor accuracy		±0.8 %RH, ±0.1 K at 10…30 °C
Long-term stability, humidity sensor		<1%RH, 0.1°C / year
Validation of analog and digital transmission (loop validation)		Enable
Temperature range without humidity (at room temp. 30 °C)	°C	+10 – 60
Temperature fluctuation when cooling is operated Temperature variation with humidity	≤ ± °C ≤ ± °C	0.3 1.0
Humidity range	%RH	30 – 90
Humidity fluctuation with temperature Humidity variation with temperature	≤ ± %RH ≤ ± %RH	2.0 3.0
Recovery time after 30 seconds for 1 door open at 25°C/ 60%RH	minutes	10
Recovery time after 60 seconds for 1 door open at 25°C/ 60%RH	minutes	15
Controller		Intelligent Control System
Off-line logging power back-up		External battery
Sensor type		Pt 100 class A (temperature), Rotronic HYGROMER® IN-1 (humidity)
Sensor and display resolution for temp. and humidity		0.01
Sensor calibration and adjustment :		
- 1-point or multi-point humidity calibration or adjustment		Yes
- 1-point or 2-point temperature calibration or adjustment		Yes
Setting, Logging and Monitoring		By external PC (exclude) and individual LCD display on chamber
Software		Fully comply to FDA CFR 21 Part 11 and GAMP5 with features : data-logging, data storage, calculation of various humidity parameters, graphic functions
Port data access		RJ45 (Ethernet)
Network		Networkable via RS485 up to 64 units
Alarm		Central Alarm System
Logging method		On-line and Off-line logging
Memory capacity		512 MB (saves 47,000 data records per MB card storage capacity)
Safety/Protection		
Overshoot temperature safety device		Cut off the main power and completed with output
Low level water protection		Cut off the heating element of humidification system

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Specification

Series		**QL300SS iC**	**QL500SS iC**
Volume	liter	285	500
Interior dimension			
Width	mm	511	625
Height	mm	1200	1430
Depth	mm	465	595
Exterior dimension			
Width	mm	595	710
Height (with roller)	mm	1850	2030
Depth (with handle)	mm	725	1020
Shelves (standard/max)	number	2/8	2/8
Electrical supply (± 10%) 50/60 Hz	V	230	230
Unit nominal power	W	2300	2500
Doors	number	1	1
Type of doors		Compression door lock	
Access port for probe calibration and mapping		Yes	
Cooling system protection from power shock		Delay on	
Refrigerant for cooling system		R-134a (Non - CFC)	
Humidification system		Steam blow system by individual/separated blower with conductance value of water feeding is 10 - 100µS (recommended)	
Material		Polished stainless steel SUS 304	
Probe/sensor accuracy		±0.8 %RH, ±0.1 K at 10…30 °C	
Long-term stability, humidity sensor		<1%RH, 0.1°C / year	
Validation of analog and digital transmission (loop validation)		Enable	
Temperature range without humidity (at room temp. 30 °C)	°C	+10 – 60	
Temperature fluctuation when cooling is operated Temperature variation with humidity	≤ ± °C ≤ ± °C	0.3 1.0	
Humidity range	%RH	30 – 90	
Humidity fluctuation with temperature Humidity variation with temperature	≤ ± %RH ≤ ± %RH	2.0 3.0	
Recovery time after 30 seconds for 1 door open at 25°C/ 60%RH	minutes	10	
Recovery time after 60 seconds for 1 door open at 25°C/ 60%RH	minutes	15	
Controller		Intelligent Control System	
Off-line logging power back-up		External battery	
Sensor type		Pt 100 class A (temperature), Rotronic HYGROMER® IN-1 (humidity)	
Sensor and display resolution for temp. and humidity		0.01	
Sensor calibration and adjustment :			
- 1-point or multi-point humidity calibration or adjustment		Yes	
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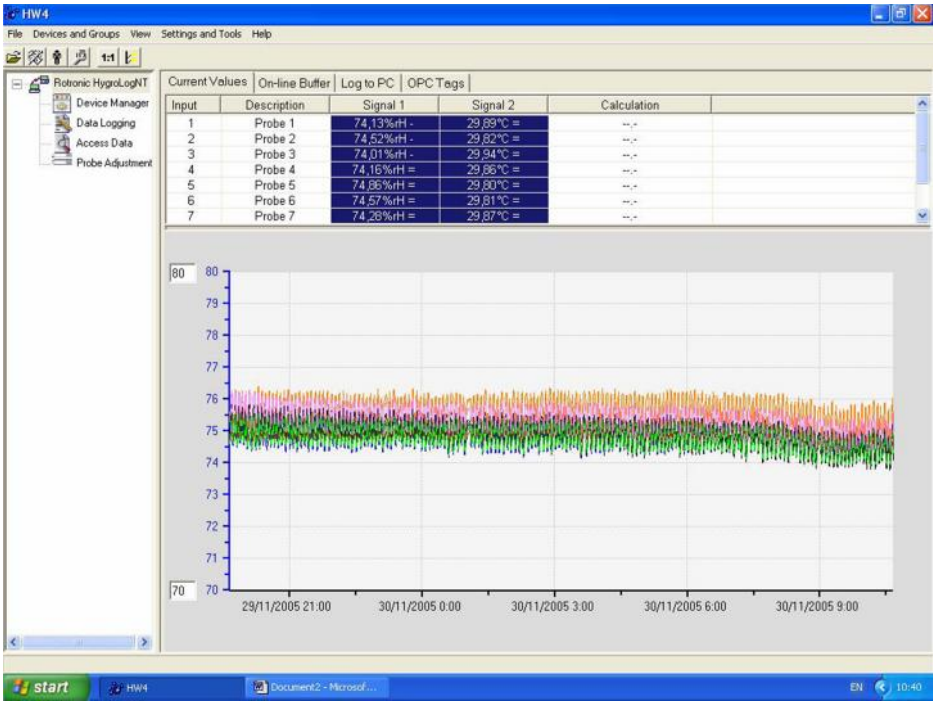
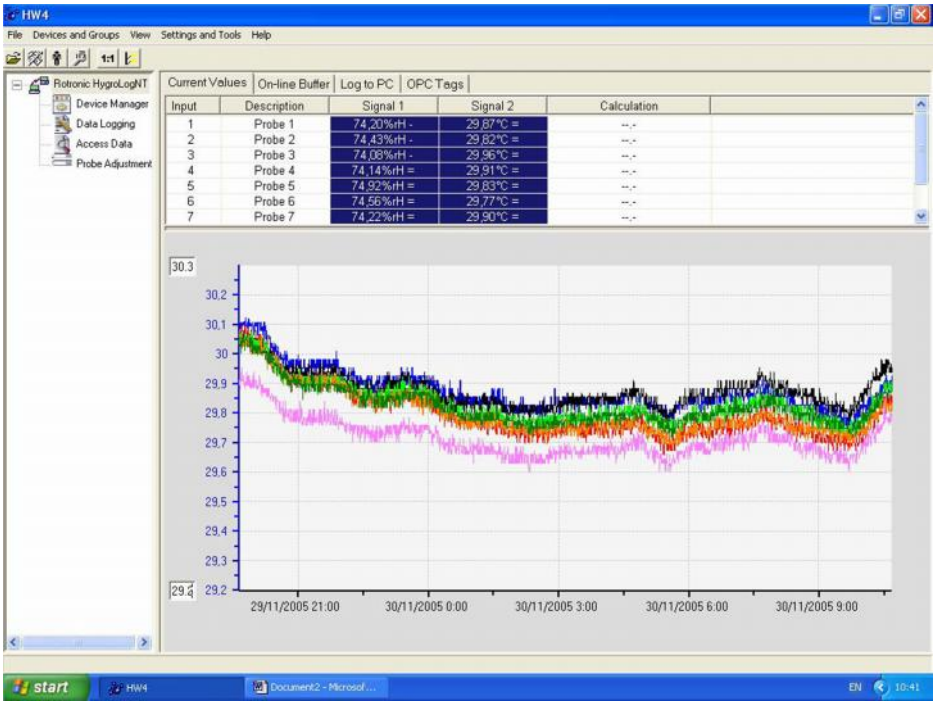
QLab Mapping Graphics

Illustration of QLab mapping graphics with full loaded condition chamber, running for 17 hours



Humidity Mapping Graphics at 7 Different Points



Temperature Mapping Graphics at 7 Different Points

If you need further information and/or enquiry, please contact us:

PT. QLAB KINARYA SENTOSA	
QLab Building, Jl. H. Basyar Raya No. 15 C-D, Jatiwaringin - Pondok Gede 17411 Indonesia	
Phone	+62 21 8497 3181 (HUNTING)
	+62 21 8497 2961
Fax	+62 21 8497 2961 Ext. 106
Product Info	qlab@qlab-ks.com
Technical Support	support@qlab-ks.com

QLab is Your Complete Solution for Stability Test Chamber

DON'T TAKE JUST OUR WORD FOR IT. LISTEN TO OUR CUSTOMERS