X-Treme Series

AUTO DRY CABINETS

The Fastest Dry Cabinets

for Drying & Baking Electronic Components

0.5%Rh Humidity | 125°C Temperature

www.x-tremeseries.com

XTreme Series
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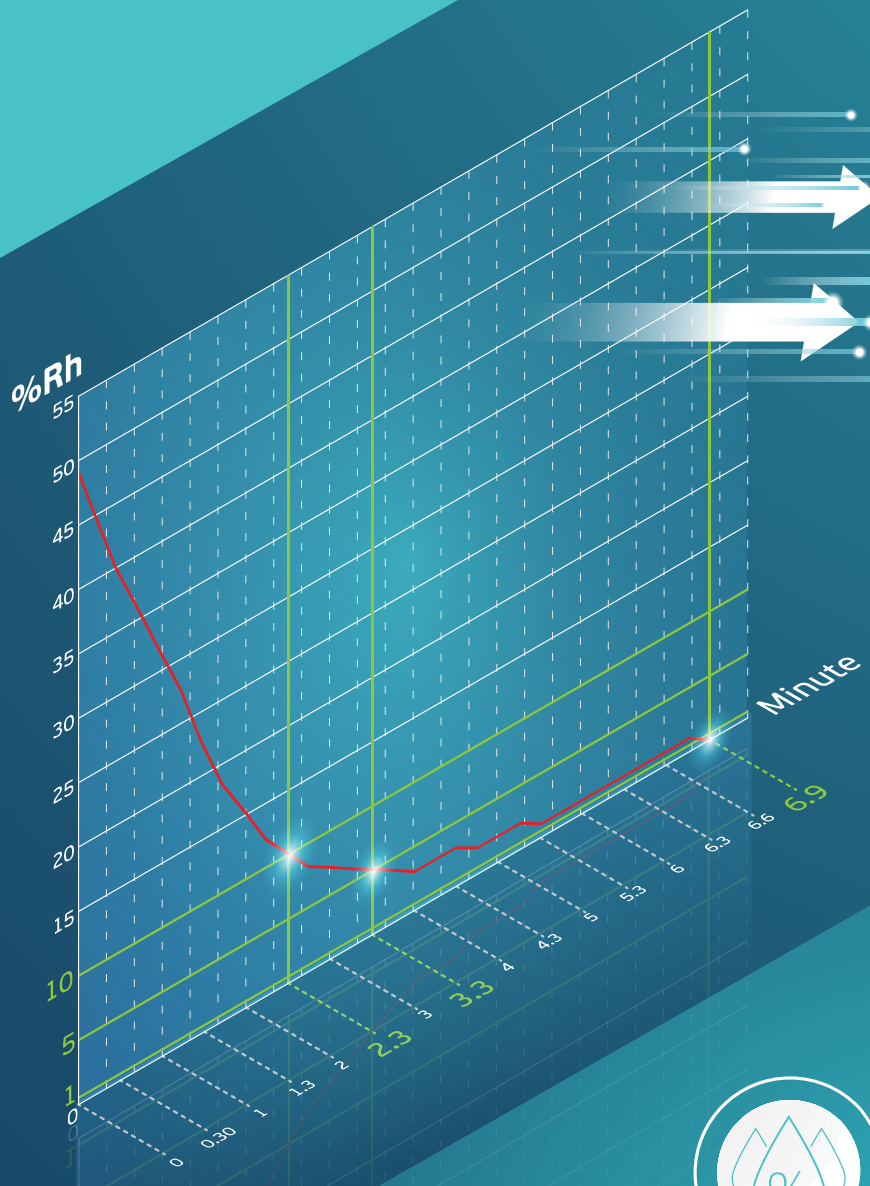


50%Rh to ≤1%Rh
under 7 minutes!

50%Rh to ≤5%Rh
under 4 minutes!

The best place for your product

Internal Relative Humidity
0.5% Rh • 95% Rh

Internal Temperature
2°C-15°C-45°C-60°C-100°C
up to 125°C

Sensor Accuracy
±0.3 Rh Humidity
±0.5°C Temperature

Standard Volumes

XL Line (1840 lt)

External Dimensions (WxHxD)	1200 x 1990 x 1050 mm	
Internal Dimensions (WxHxD)	Non Insulated	Insulated
	1197 x 1654 x 930 mm	1178 x 1634 x 930 mm
Net Volume	Non Insulated	Insulated
	1840 lt	1790 lt
Weight*	280 Kg	
Average Power Consumption*	50W / hour	

*** Depends on configuration**

XT Line (1250 lt)

External Dimensions (WxHxD)	1200 x 1990 x 750 mm	
Internal Dimensions (WxHxD)	Non Insulated	Insulated
	1197 x 1654 x 630 mm	1178 x 1634 x 630 mm
Net Volume	Non Insulated	Insulated
	1250 lt	1215 lt
Weight*	190 Kg	
Average Power Consumption*	50W / hour	

*** Depends on configuration**

XS Line (300-600-900 lt)

External Dimensions (WxHxD)			
XS Line Cabinets	XS-300	606 x 1128 x 750 mm	
	XS-600	606 x 1990 x 750 mm	
	XS-900	606 x 1990 x 1050 mm	
Internal Dimensions (WxHxD)		Non Insulated	Insulated
XS Line Cabinets	XS-300	603 x 792 x 630 mm	584 x 772 x 630 mm
	XS-600	603 x 1654 x 630 mm	584 x 1634 x 630 mm
	XS-900	603 x 1654 x 930 mm	584 x 1634 x 930 mm
Net Volume		Non Insulated	Insulated
XS Line Cabinets	XS-300	300 lt	285 lt
	XS-600	625 lt	600 lt
	XS-900	925 lt	890 lt
Weight *			
XS Line Cabinets	XS-300	90 Kg	
	XS-600	134 Kg	
	XS-900	160 Kg	
Average Power Consumption*		50W / hour	

*** Depends on configuration**

Drying Methods

Auto Dry Cabinets (Dryer)

Auto Dry Dehumidification cabinets are the latest technology solution in the fight against moisture. The main advantage they bring is their plug-and-play nature and the fact that once you plug in the cabinets they virtually work by themselves after that point without the need for consumables.

If you choose to install two dryer units in your Cabinet it will be dehumidifying non-stop as our software makes sure that the dryer units never go to regeneration at the same time. Your products are too valuable to be left in undesirable conditions.

Stop worrying about your products, your time is too valuable. Let us take care of the products and material you store while you continue to do your work.

Smart Nitrogen Cabinets (N_2)

One of the earliest methods of dehumidification is use of dry gas of Nitrogen. Nitrogen purging is an effective method especially where oxidation is a concern as nitrogenous environments are ideal for preventing moisture adsorption and corrosion.

Our Smart Nitrogen System adjusts the utilized gas to minimize the consumption levels while keeping the humidity levels at the desired values, saving your money without comprising the protection of your materials.

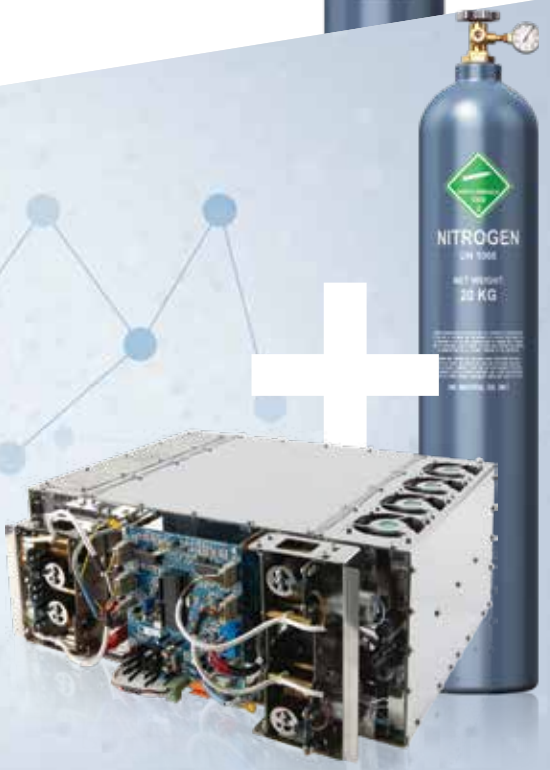
Hybrid Cabinets (Dryer + N_2)

X-Treme Series Auto Dry Cabinets offer complete solutions which provide you benefits of both systems.

Our hybrid cabinets which have a dryer unit installed alongside with our Smart Nitrogen System saves cost by alternating between nitrogen and the dryer to ensure the fastest, oxidation free storage environment.

When reached the desired levels, Smart Nitrogen System cuts off the gas and hands over the complete operation to the Dryer Unit. Hybrid cabinets provides significant cost and time saving.

They are the fastest dry cabinets in the world!



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Humidity Management

Ultra-Fast Dehumidification Rate
X-Treme Series has the fastest recovery time in the market. ≤ 1%Rh in under 7 minutes!

Low Levels of Humidity
Our cabinets can reach the lowest level as 0,5%Rh.

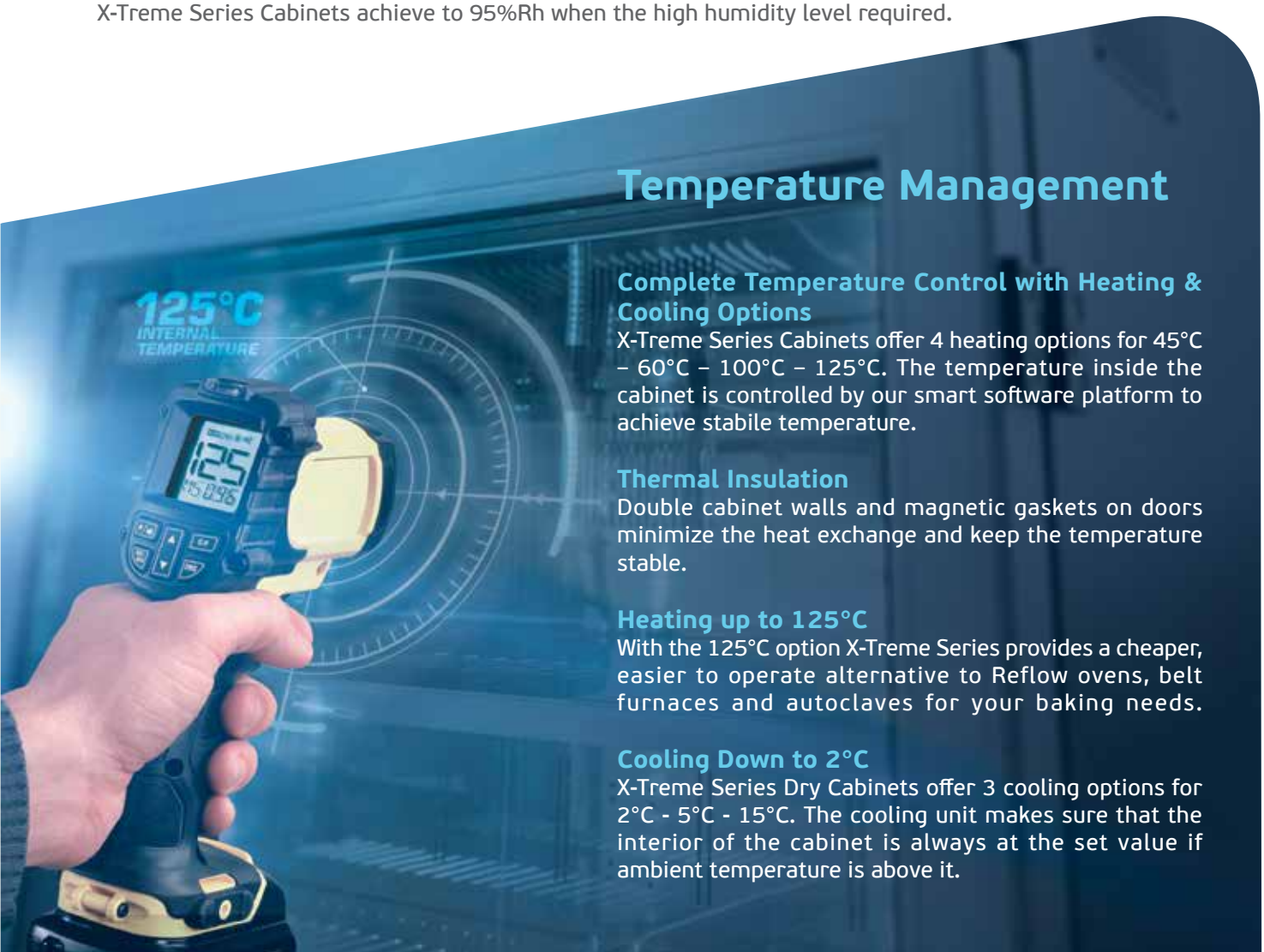
Minimizing the Threat
Multidoor configuration ensures minimal ambient conditions penetrate the cabinet.

Homogenous Distribution
Thanks to the unique design of air circulation system provides homogenous distribution.

Stable Operations & Long-term Usage
The cabinets are designed for stable, reliable operation and have outstanding long-term usage over 10 years.

Continuous Dehumidification
With two dryer units provide continuous and uninterrupted dehumidification.

Humidification
X-Treme Series Cabinets achieve to 95%Rh when the high humidity level required.



Temperature Management

Complete Temperature Control with Heating & Cooling Options
X-Treme Series Cabinets offer 4 heating options for 45°C – 60°C – 100°C – 125°C. The temperature inside the cabinet is controlled by our smart software platform to achieve stabile temperature.

Thermal Insulation
Double cabinet walls and magnetic gaskets on doors minimize the heat exchange and keep the temperature stable.

Heating up to 125°C
With the 125°C option X-Treme Series provides a cheaper, easier to operate alternative to Reflow ovens, belt furnaces and autoclaves for your baking needs.

Cooling Down to 2°C
X-Treme Series Dry Cabinets offer 3 cooling options for 2°C - 5°C - 15°C. The cooling unit makes sure that the interior of the cabinet is always at the set value if ambient temperature is above it.

Accuracy

High Precision
X-Treme Series Auto Dry Cabinets are designed to meet your needs with excellent accessories. We provide the best conditions for your valuable materials to keep them safe. We invest the best sensors to create the exact conditions you require.

Reliabilty
X-Treme Series have unique sensor which provides accuracy of ±0,3 %Rh for humidity and ±0,5 °C for temperature. All related documents and calibration certificates are available.

Ambient Conditions
Our cabinets offer you to monitor and log the outdoor humidity and temperature with outdoor sensors.

Monitoring & Control

Complete Control System
Our user-friendly in-house software is specifically coded for our cabinet and can monitor and control each and every aspect of the operation to the simplest detail.

Datalogger (2 GB)
Datalogger allows users to track and log data of multiple parameters. These can be exported to your computer by internet connection for more detailed analysis.

Remote Monitoring
Remote Monitoring System provides you flexibility to check and monitor humidity & temperature of cabinet from a distance.

The system can send notifications via e-mails to user when the set parameters exceeded.

Details Matter
We provide a real-time clock (RTC) for accurate time stamps, alarms for temperature and humidity and interior illumination options.

Security & Protection

Automatic Door Locks
Features of automatic door locks and operation without keys are optimized process for materials handling and storage.

Unauthorized Access - RFID
Software provides passwords up to 8 operators and prevent unauthorized access to the materials & stored products. You can also access to cabinet by RFID cards.

Smart Security System
The status of the doors is monitored with magnetic switches. The Door Ajar Alarm notifies to user when the door open or not being closed properly.

ESD
X-Treme Series Cabinets are completely ESD safe. Our cabinets are painted with Electrostatic paint and the whole system is grounded from several points.

Independent Systems Working As One
Each System is protected by their own fuses to prevent damage to affect the others. This design prevents large scale damage in a rare case of malfunction.

Customization

Customized cabinets bring you more
The high design flexibility combined with the high standards of precision make our customized cabinets an outstanding benefit for users.

X-Treme Series provides many storage systems such as shelves, sliding shelves, dividers, feeder storage and so much more. Also, many accessories such as PCB racks, HEPA filters, UV Lights, alarm bars are available.

Team up with X-Treme Series for your customized solution
Our team made up exclusively of professional technicians and engineers support you with their combined global-scale experience of more than 30 years.

We give you the freedom to achieve reliable, efficient and stable solutions through various options to X-Treme Series. Please contact us for further details.

Features & Standards

X-Treme Series Auto Dry Cabinets Models	Stainless S. Shelves	Dryer Unit	Second Dryer Unit	Smart Nitrogen Unit	Automatic Door Locks	RFID Access	Indoor Light	Heater Kit 45° C	Heater Kit 60° C	Heater Kit 100° C	Heater Kit 125° C	Outside Humidity & Temperature Sensor
XTC-510-01	10	✓	●	●	●	●	●	●	●	●	●	●
XTC-520-01	10		✓	●	●	●	●	●	●	●	●	●
XTC-510-S1	10	✓	●	●	●	●	✓	●	●	●	●	●
XTC-510-S2	10	✓	●	●	●	●	✓	✓			●	●
XTC-510-S3	10	✓	●	●	●	●	✓		✓		●	✓
XTC-510-S4	10	✓	●	●	✓	●	✓		✓		●	✓
XTC-520-S5	10		✓	●	●	●	✓	●	●	●	●	●
XTC-520-S6	10		✓	●	●	●	✓	✓			●	●
XTC-520-S7	10		✓	●	●	●	✓		✓		●	✓
XTC-520-S8	10		✓	●	✓	●	✓		✓		●	✓
XTC-N2	10	●	●	✓	●	●	●	●	●	●	●	●
XTC-510-DN2	10	✓	●	✓	●	●	●	●	●	●	●	●
XTC-520-DN2	10		✓	✓	●	●	●	●	●	●	●	●
XSC-300-01	2	✓	●	●	●	●	●	●	●	●	●	●
XSC-600-01	5	✓	●	●	●	●	●	●	●	●	●	●
XSC-900-01	5	✓	●	●	●	●	●	●	●	●	●	●
XSC-300-N2	2	●	●	✓	●	●	●	●	●	●	●	●
XSC-600-N2	5	●	●	✓	●	●	●	●	●	●	●	●
XSC-900-N2	5	●	●	✓	●	●	●	●	●	●	●	●
XSC-300-DN2	2	✓	●	✓	●	●	●	●	●	●	●	●
XSC-600-DN2	5	✓	●	✓	●	●	●	●	●	●	●	●
XSC-900-DN2	5	✓	●	✓	●	●	●	●	●	●	●	●
XLC-01	●	✓	●	●	●	●	●	●	●	●	●	●
XLC-02	●		✓	●	●	●	●	●	●	●	●	●
XLC-N2	●	●	●	✓	●	●	●	●	●	●	●	●
XLC-510-DN2	●	✓	●	✓	●	●	●	●	●	●	●	●
XLC-520-DN2	●		✓	✓	●	●	●	●	●	●	●	●

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√ Standart ● Optional ● Not Available

Oxygen (O2) Sensor	Datalogger	Remote Monitoring	External Alarm	Stainless S. Sliding Shelves	Reel Holders	Stainless S. U Divider & I Divider	Humidifier Unit	Cooling Unit	Hepa Filter	Feeder Storage Solutions	PCB Holder
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Reference Conditions for Drying SMD Packages and Components

			Drying at 1%Rh		Drying at 5%Rh IPC J-STD-033D	
Body Thickness	**MSL**	**25° C**	**40° C**	**60° C**	**40° C**	**90° C**
≤ 0.5 mm	2	Not Required	Not Required	Not Required	Not Required	Not Required
	2a	9 Hours	3 Hours	1 Hour	12 Hours	2 Hours
	3	18 Hours	6 Hours	1 Hour	22 Hours	3 Hours
	4	18 Hours	6 Hours	1 Hour	22 Hours	3 Hours
	5	18 Hours	6 Hours	1 Hour	23 Hours	3 Hours
	5a	21 Hours	7 Hours	2 Hour	26 Hours	4 Hours
> 0.5 mm ≤ 0.8 mm	2	Not Required	Not Required	Not Required	Not Required	Not Required
	2a	3 Days	1 Day	6 Hours	4 Days	15 Hours
	3	3 Days	1 Day	6 Hours	4 Days	15 Hours
	4	3 Days	1 Day	6 Hours	4 Days	16 Hours
	5	3 Days	1 Day	6 Hours	4 Days	16 Hours
	5a	3 Days	1 Day	6 Hours	4 Days	16 Hours
> 0.8 mm ≤ 1.4 mm	2	Not Required	Not Required	Not Required	Not Required	Not Required
	2a	6 Days	2 Days	12 Hours	8 Days	25 Hours
	3	6 Days	2 Days	12 Hours	8 Days	25 Hours
	4	9 Days	3 Days	15 Hours	10 Days	27 Hours
	5	9 Days	3 Days	17 Hours	11 Days	28 Hours
	5a	9 Days	3 Days	18 Hours	12 Days	30 Hours
> 1.4 mm ≤ 2.0 mm	2	18 Days	6 Days	38 Hours	25 Days	63 Hours
	2a	21 Days	7 Days	2 Days	29 Days	3 Days
	3	27 Days	9 Days	2 Days	37 Days	4 Days
	4	36 Days	12 Days	3 Days	47 Days	5 Days
	5	42 Days	14 Days	4 Days	57 Days	6 Days
	5a	60 Days	20 Days	5 Days	79 Days	8 Days
> 2.0 mm ≤ 4.5 mm	2	60 Days	20 Days	5 Days	79 Days	10 Days
	2a	60 Days	20 Days	5 Days	79 Days	10 Days
	3	60 Days	20 Days	5 Days	79 Days	10 Days
	4	60 Days	20 Days	5 Days	79 Days	10 Days
	5	60 Days	20 Days	5 Days	79 Days	10 Days
	5a	60 Days	20 Days	5 Days	79 Days	10 Days
Exception for BGA package > 17 mm x 17 mm or any stacked die package	2 - 5a	Not applicable	Not applicable	64 days	Not applicable	Not applicable

The information given above is only for general guide and advise. There are several parameters like Moisture levels, Moisture gains of components, Ambient conditions, Package types etc involved in moisture absorbtion and drying.

X-Treme Series
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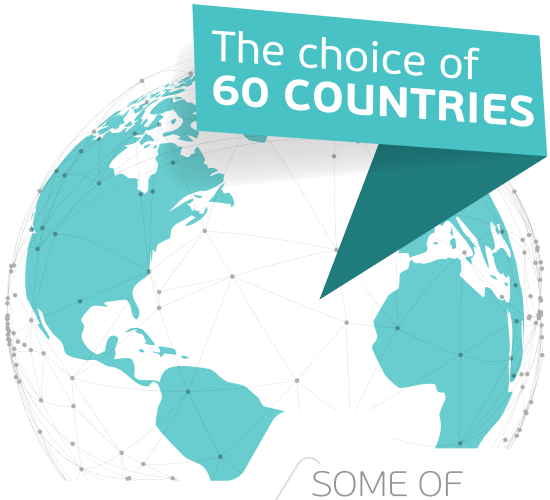
High-end Technology

7" Touch Screen Panel

Our cabinets are equipped with variable and high-end features. One of the most important feature is the touch screen panel. The panel provides 800x480px resolution in 7" touch capable area. The user can reach all important data in the cabinets with simple clicks.

Industry 4.0

X-Treme Series Auto Dry Cabinets can be reached remotely via computers, phones and tablets which are using Wi-Fi and ethernet connections. Humidity and temperature values can be followed instantly. All datalogger parameters can be monitored and graphed for your analysis.



SOME OF OUR REFERENCES

Lockheed Martin · NASA · Boeing · Bosch (Invented for life) · Siemens · Airbus · Pharmavite
Intel · Honeywell · Thales · Fraunhofer · BAE Systems · Leonardo · University of Oxford
Rheinmetall · flex · Safran · Diehl Defence · Continental · Philips · Celestica
IAI · Lenovo · Sandia National Laboratories · Westinghouse · Leica · Schneider Electric · Luminar
Ultra Electronics · Ericsson · B Braun · Megger · Together ahead. RUAG · Boehringer Ingelheim · The European Space Agency esa
İşbir Sentez · TÜBİTAK · aselsan · VESTEL · arçelik · Phoenix Contact · Medtronic
NNSA · Havelsan · Jaguar · British American Tobacco · Alstom · CCS · General Atomics
Ayesaş · TEI · Türkhavacılık Uzaysanayii · Gentex Corporation · BNA · ESEN · Johns Hopkins University
Collins Aerospace · Heraeus · System Sensor · Seagate · Moog · Jabil · Photonis
Western Digital · roketsan · Renishaw · Schott · Turkish Technic · General Mobile · Teledyne Technologies
Rochester Electronics · University of Michigan · Oligomer · Baykar · Togg

and many more...

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The Fastest Dry Cabinets

for Drying & Baking Electronic Components

Manufactured by EMT Electronics
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IPC Member

CE

RoHS

ESD

Compliance with IPC/JEDEC-J-STD-033D standards
Compliance with CE and Rohs

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