

# dry facts

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**Bry-Air**  
Leaders in Dehumidification...Worldwide

dry facts

150<sup>TH</sup>  
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**“Dry facts”**  
our quarterly  
newsletter, touching  
a milestone with  
this 150<sup>th</sup> issue.

Since its launch in 1981, Dry facts has brought you dry and fresh air stories, about Pahwa group’s progress through all these years

**2006**

Acquired the Bry-Air global brand and the centre of technical excellence shifted to India under Pahwa Group

Bry-Air Acquires Global Rights from Bry-Air Inc, USA



**2010**

Bry-Air Prokon, which specializes in inline moisture measurement technology, was set up in Chiasso, Switzerland



**2014**

Established a plant in Brazil. In the same year, we celebrated 50<sup>th</sup> year as Bry-Air, with 80+ years of company history behind us applying desiccants



**2016**

Launched Super BrySmart series (BBS) Desiccant Dehumidifier after integrating tomorrow based concept and technologies



**2018**

Bry-Air won prestigious Star Performer EEPC Award for Outstanding Export Performance



**1981**

Bry-Air took root in Asia with establishment of Bry-Air India (now, Bry-Air Asia)

First edition of Dry Facts published



**1988**

Established delair plant in India for manufacturing wide range of compressed air dryers



**1991**

Inaugurated Bry-Air Malaysia plant to support the ASEAN and Asia Pacific Region with state-of-the-art air drying products



**1999**

Bry-Air set its foot in China by setting up a plant in Shanghai

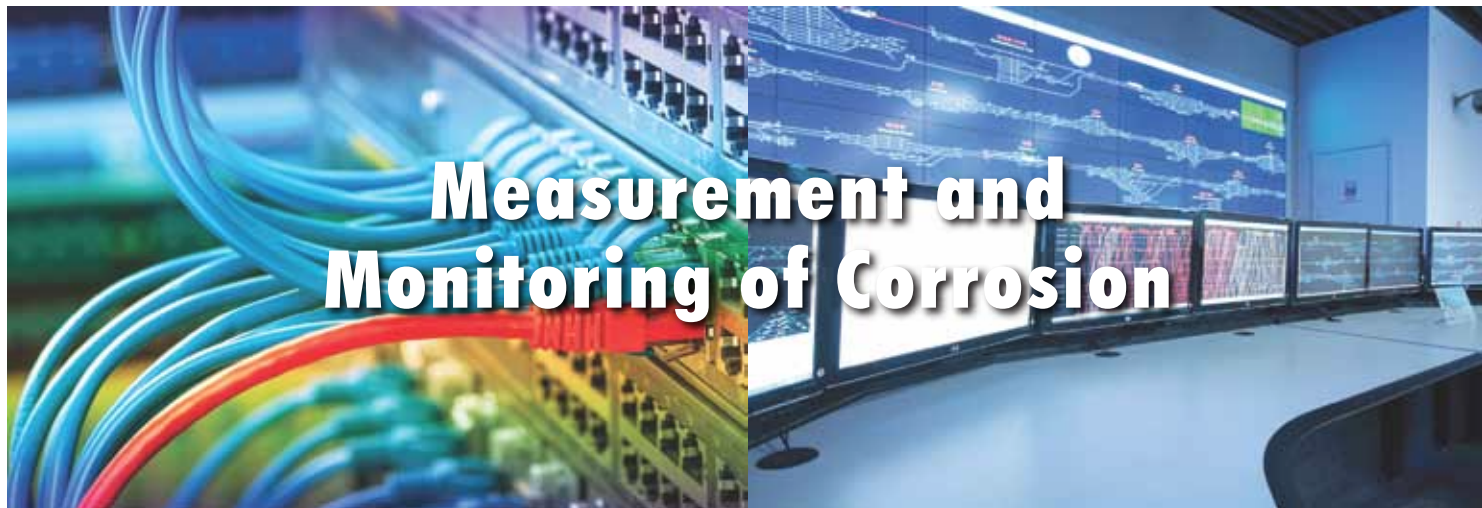


*Thank you for inspiring and encouraging us with your response. This milestone would not have been possible without your support.*

# Corrosion affects Data Center's reliability . . .

## . . . Monitor Corrosion at your Data Center Smartly!

A combination of humidity, temperature, and various gaseous contaminations can result in corrosion which in turn leads to downtime in Data Centers. Installation and maintenance of effective monitoring devices ensures early detection of corrosion and thus prevents downtime.



## Measurement and Monitoring of Corrosion

Typically there are two types of measurement methods as below:

### 1 Corrosion Classification Coupon (CCC):

It provides a direct, quantitative measurement of the overall corrosion potential of an environment. These coupons have two pure metal strips and are placed at strategic locations in the operating environment for a period of 30 days. After 30 days, the coupons are analysed in a laboratory.

The thickness of the layer of corrosion which forms on the metal strips determines the severity level as per ISA 71.04-2013 standard.

#### Corrosion Classification Coupon (CCC)

Copper Corrosion Coupon	Silver Corrosion Coupon
CAUTION: DO NOT TOUCH METAL STRIP	
Installation Date: _____	
Company: _____	
Room Location: _____	
Contact Name: _____	
Email: _____ (for returned report)	
Removal Date: _____	

### 2 Real time atmospheric corrosion monitor:

These instruments help to access severity level on real time basis. The measurements are extrapolated in 24 hours for 30 days to know the severity level as per ISA standard. It also measures room temperature, relative humidity and optionally, the differential pressure to give the complete parameters.

Real time atmospheric corrosion monitors can be further classified in two technologies:

- One is based on Quartz Crystal Microbalance (QCM), which measures the rate of increase of corroded metal sensors mass.
- The other determines the rate of electrical resistance increase of corroded metal strips.



Atmospheric corrosion monitor

### Corrosivity Levels of Environment as per ISA 71.04 - 2013 Standard

Class	Severity Level	Cu/Ag Reactivity Rate/Month	Comments
G1	Mild	<300Å=Cu <200Å=Ag	An environment sufficiently well-controlled such that corrosion is not a factor in determining equipment reliability.
G2	Moderate	<1000Å	An environment in which the effects of corrosion are measurable and corrosion may be a factor in determining equipment reliability
G3	Harsh	<2000Å	An environment in which only specially designed and packaged equipment would be expected to survive. Specifications for equipment in this class are a matter of negotiation between user and supplier.
GX	Severe	>2000Å	An environment in which there is a high probability that corrosive attack will occur. These harsh levels should prompt further evaluation resulting in environmental controls or specially designed and packaged equipment.

# When *moisture* is Torture

*In this column, we share our experience with you regularly in major application areas where usage of dehumidification is both extensive and essential.*

## Control moisture during assembly and packaging of Diagnostic kits



### Are your Rapid Diagnostic Kits Reliable?

Diagnostic kits need to be reliable and accurate! Quick medical test results and accurate readings

undoubtedly play a crucial role in timely diagnosis of many preventable diseases. Thus, manufacturers of diagnostic products need to ensure that processing, storage, assembly and packaging areas follow GMP and environment controls norms. Humidity needs to be continuously and precisely controlled. Humidity and Temperature control needs are very



**Plenty of RDT/LFA/ In-Vitro diagnostic device available in the market to monitor various ailments like:**

- Hepatitis
- Diabetes
- Malaria
- Pregnancy
- HIV
- Influenza A/B
- Thyroid
- Urinary infections and many more

stringent during assembly and packaging of Diagnostic strips, reagents, kits or Lateral Flow Assays (LFA).

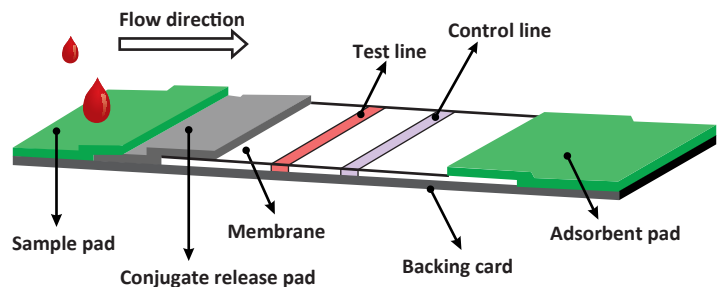
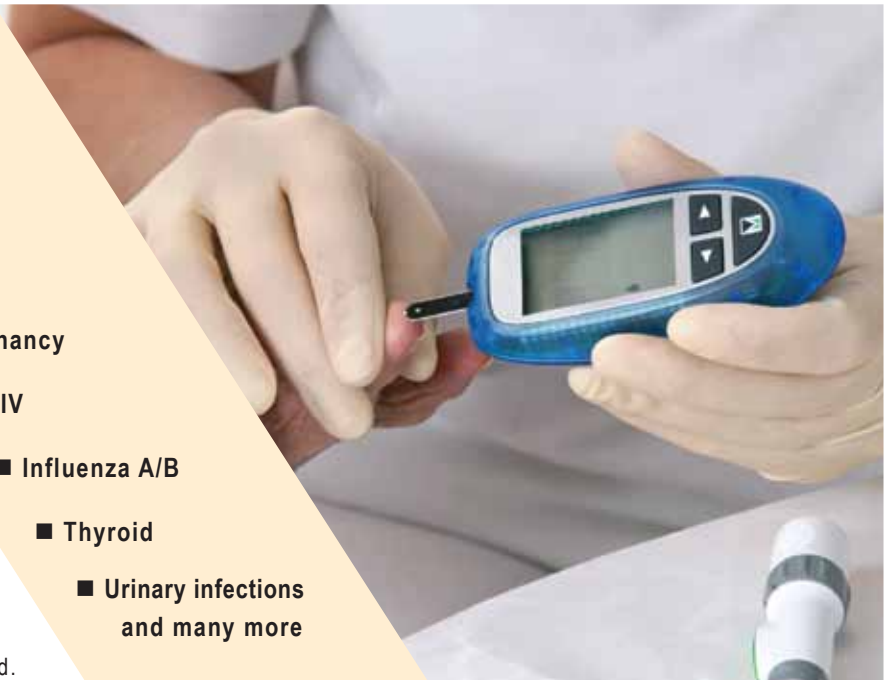
The LFA consist of vulnerable test strips which are developed after drying, laminating and assembling several sensitive components. These components include nitrocellulose membranes, sample pads, conjugate pads, adsorbent pad.

While following manufacturing procedures, it is recommended to maintain the relative humidity at 15% (+/-5%) and temperature at 20°C (+/-2°C). Any variation in the relative humidity and temperature can adversely affect the performance of the LFA reagents and can cause false reports.

LFAs are highly sensitive, thus, their process must comply with GMP procedures including the recommended environmental conditions.

### Bry-Air Solution

A desiccant dehumidifier is an ideal solution, which can maintained the recommended relative humidity inside the manufacturing unit. Bry-Air designs specialized dehumidification system and complies with the most stringent level of GMP and hygiene standards. It help in maintaining hygienic conditions all year round, regardless of the ambient conditions, at a very low dew point. Bry-Air can provide custom designed package systems with pre-filter, after-filter, precooling (fresh air cooling), post-cooling and bypass arrangement for complete air handling and environment control solutions for each stage of LFA manufacturing.



Components of test strip (Image source: Portland Press Ltd.)

**Enter Bry-Air... exit moisture**



# Compact answer to massive problems

## Bry-Air® FFB series COMPACT DEHUMIDIFIERS

FFB Dehumidifier, the compact and smart desiccant dehumidifier has designed to integrate the "small footprint" with the "ruggedness" of the industrial dehumidifier.

Bry-Air's FFB series compact Dehumidifiers have the largest range in capacity, 170 cmh to 3000 cmh and thus, can handle 'massive' humidity problems in spite of its compact size.



170 cmh  
through  
3000 cmh,

CE certified  
Backed by  
Brycare™ Service

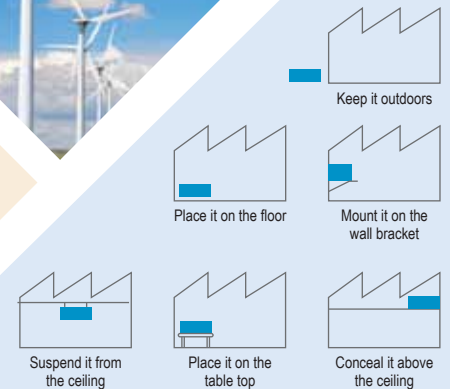
The compact design and relatively small size and weight, makes it easy to install anywhere –inside or outside the controlled area, even outdoors, it can be mounted on the wall/ceiling or placed on the table. Compacts can also be mounted on trolleys for applications where the site is not fixed in the counter flow.

### Unlimited Applications:

Typical applications where dehumidifiers, especially, compacts find wide usage are:

- Diagnostic kit packaging
- Candy and confectioneries
- Laboratories ■ Tea and coffee
- Turbine ■ Leather ■ Spices
- Safety glass ■ Spray drying
- Chocolate ■ snacks
- Pharmaceutical and many more

### Place it anywhere:



## Event snapshot



Fi India, Greater Noida, 30 Aug-1 Sept 2018



Anutech International FoodTech, Mumbai  
27-29 Sept 2018



UPASI Tea Conference & Exhibition, Coonor,  
28-29 Sept 2018

**Bry-Air®**

Leaders in Dehumidification... Worldwide

#### BRY-AIR (ASIA) PVT. LTD.

**Corporate Office:**  
21C, Sector-18, Gurugram 122015  
Phone: +91-124-4091111  
E-mail: bryairmarketing@pahwa.com

**Registered Office:**  
20, Rajpur Road, Delhi 110054  
Phone: +91-11-23906666  
E-mail: enquire@pahwa.com  
Web: www.bryair.com

CIN: U74210DL1981PTC012456

#### BRY-AIR (MALAYSIA)

Sdn. Bhd. (1977 12-W) Lot.11,  
Jalan P17 Bangi Industrial Estate  
43650 Bandar Baru Bangi Selangor

#### H.O. & Factory

Phone: +60-3-89256622  
E-mail: bryair@bryair.com.my

#### Sales Office

Phone: +60-3-77259919  
E-mail: bam@bryair.com.my  
Website: www.bryair.com.my

#### BRY-AIR (USA)

10783 St. Rt. 37W Sunbury,  
Ohio 43074  
Phone: +1-740-965-2974  
E-mail: bryair1@bry-air.com  
Website: www.bry-air.com

#### BRY-AIR (CHINA)

2F, Building 5, 189 Zhonglian  
Road, Minhang District  
Shanghai 201111  
Phone: +86-21-34126537  
E-mail: info@bryair.com.cn  
Website: www.bryair.com.cn

#### BRY-AIR (UAE)

Suite 98-99, Y1 Building, SAIF Zone,  
P.O. Box 9306 Sharjah, UAE  
Phone: +971-6-5574622  
E-mail: support@bryair.ae  
Website: www.bryair.com/uae

#### BRY-AIR (BRAZIL)

Rodovia dos Minérios, 4578  
Almirante Tamandare, PR  
CEP - 83512-000  
Phone: +55-41-36982222  
E-mail: contato@bryair.com.br  
Website: www.bryair.com.br

#### BRY-AIR (INDONESIA)

#GF Suite 043A, Wisma Aldiron Jl. Jend.  
Gatot Subroto Kav. 72 Jakarta 12870  
Phone: +62-21-79199023  
E-mail: indomark@bryair.com.my  
Website: www.bryair.com.my/indonesia

#### BRY-AIR (PHILIPPINES)

Unit504, Richville Corporate Center,  
1314 CA Extn. Madrigal Business Park,  
Ayala Alabang Muntinlupa City 1780  
Phone: +63-2-8078436  
E-mail: mail@bryair.com.ph  
Website: www.bryair.com/philippines

#### Enter Bry-Air... exit moisture

#### BRY-AIR (VIETNAM)

4th Floor, MPO Office Building 141D  
Phan Dang Luu Phu Nham, HCMC  
Phone: +84-8-39956498  
E-mail: vietmarketing@bryair.com.my  
Website: www.bryair.com.my/vietnam

#### BRY-AIR (NIGERIA)

Plot - 1, Block 9B, Howson Wright  
Estate Olusosun, Oregun, Behind  
Philips, Near Ojota, Lagos  
Phone: +234-8097276772  
E-mail: bryairigeria@pahwa.com  
Website: www.bryair.com/nigeria

#### BRY-AIR (PROKON)

89/6, R.K. Mission Mag. XII CH-6828  
Balerna, Switzerland  
Phone: +41-91-6830971  
E-mail: info@pro-kon.ch  
Website: www.bryairprokon.com

#### BRY-AIR (BANGLADESH)

89/6, R.K. Mission Mag. XII CH-6828  
Balerna, Switzerland  
Phone: +41-91-6830971  
E-mail: info@pro-kon.ch  
Website: www.bryairprokon.com