

# Ultra Compact Front loading Test Chamber Range Maximum Performance, Minimal Footprint

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The **Ultra Compact** front loading chamber range from Ascott is the perfect choice for customers who have limited floor area, and who only wish to test small or few components, in full compliance with international test standards.



Testing climate resistance to the limit

# **Ultra Compact** Front Loading Test Chambers



**Standard Salt Spray Chamber** 

The S300is is designed for continuous salt spray tests, such as ASTM B117, ISO 9227, JIS Z 2371 etc.

It can also be used with pH neutral salt solutions (NSS) or test solutions acidified by the addition of Acetic Acid (ASS) or Cupric Acid (CASS).



# **Premium Salt Spray Chamber**

The S300ip can perform the same basic salt spray tests as Standard models, but in addition it is equipped with extra features which enable them to undertake 'modified' tests such as ASTM G85 where salt spray is usually combined with one other function, in a two-part cycle. For example: salt spray and condensation humidity, or salt spray and drying.



# **Cyclic Corrosion Test Chamber**

The CC300ip is designed to be flexible enough to comply with as many different CCT specifications as possible.

The CC300ip can cycle between salt spray, wetting, drying and controlled humidity in any sequence for any period of time.

# Key Features to all models...

- Front loading system for ease of loading test samples in a wide range of shapes and sizes.
- Chamber designed with angled interior roof to avoid condensation droplets falling onto samples below.
- Pneumatically operated door for ease of opening and closing.
- High strength GRP front door available in 9 standard colours with windows for viewing samples during testing.
- Compact design which will pass through an 850mm /33" wide door aperture for ease of installation.
- Touchscreen available in multiple languages for ease of understanding and use.
- Exterior shell is fully resistant to corrosion.
- 115L / 30US Gallon portable salt solution tank with wheels, for ease of access to a



water source, and an integral drain for ease of cleaning.

- S300is Standard Salt Spray Chamber Key Features
- True colour 3.5" Touch-screen controller interface, for ease of programming and control, with graphical display of temperature.



- Centrally located viewing window for good visual access to chamber interior and test samples when door closed.
- Timed canopy lock and purge of the chamber interior with fresh air after testing and before the chamber is opened, preventing corrosive salt fog escaping.
- Peristaltic pumping system for precise control and delivery of the salt solution.
- Chamber heated by externally mounted heater mats, protecting them against damage from the corrosive climate inside the chamber, and ensuring uniform heat distribution inside the chamber.
- Base castors and integrated fork lift truck runners, for ease of transportation.

- Calibration certificate.
- 12 month Consumables spares kit.
- Easily accessible salt spray atomizer(s) in transparent, durable acrylic with integral filter, for ease of maintenance.



# S300ip Premium Salt Spray Chamber Key Features

# Premium models have the same features as Standard models plus:

 Upgraded True colour, 7" wide screen WVGA Screen user control interface, using the latest version of our highly intuitive operating software.

Program Menu			sc
View, Edit, d	elete or create new	test profiles.	
Main Programs	Sub Programs	Single Lin	e
$\sim$			
Complete test profiles, containing more than one step.	Building blocks used in main programs. Ideal for programs with lots of repetition.	One step program Ideal for testing a calibration.	
Select	Select	Select	
18:35:01	No Faults Detected	Ste	ppe

 Large capacity memory, allowing for extensive customer programs to be stored, 254 main programs of up to 200 steps, 100 sub programmes and 254 single line programs.  480p (0.38 megapixel) high resolution icon based interface available in multiple languages for ease of understanding and use.



 RJ45 communications port enabling the chamber to be wire or wirelessly connected to a local area network (LAN) for logging and remote programming via a computer running optional software( Ref ACC121).

- Integrated titanium immersion heater to create condensation humidity, for testing to a wider range of 'modified' salt spray tests.
- Chamber can perform two-part test profiles, Salt Spray and drying, or Salt Spray and Wetting.
- A real-time, user configurable 'clock' to enable different test samples to be batched and have their exposure time monitored separately, with alarms to warn when a preset test period has been completed.

# CC300ip Cyclic Corrosion Chamber Key Features

# Cyclic Corrosion models have the same features as Standard & Premium Salt Spray chambers plus:

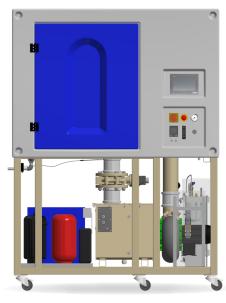
- State of the art capacitive Humidity Measuring Sensor with %RH Display on the Touchscreen controller.
- User adjustable Controlled Humidity for atmospheres up to 94% RH, at temperature controlled atmospheres from ambient to +60°C/140° (see graph on page 4).
- Temperature & Humidity Graphical Logging Facility on chamber touchscreen with 168 hours playback.
- Interior Viewing Window (unless refrigeration ACC29/31 option is supplied).
- Temperature and Humidity monitoring in SCADA using OPC-UA.

- As standard the chamber comes with the ability to create 5 distinct climates:
  - Salt Spray mode
  - Condensation Humidity mode
  - Controlled Humidity mode
  - Drying mode
  - Ambient Drying.

These can be programmed to occur in any sequence, for any period of time and can be programmed to reoccur automatically.

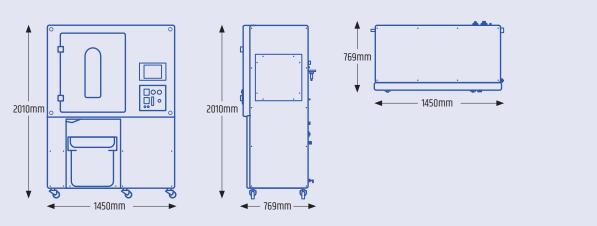
 Wide range of optional accessories available to further extend the chambers test conditions.





# **Small Compact Footprint**

**300L** - 1450 x 769 x 2010mm / 57 x 30 x 80"

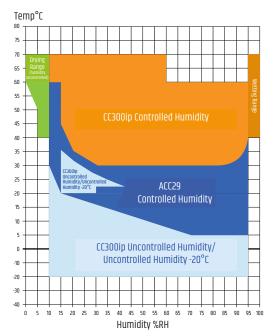


# **Specifications**

	S300is Test Chamber Performance		
	Temperature Range	Humidity Range	Salt Spray Fallout rates
Salt Spray Mode	Adjustable from Ambient to +50°C / +122°F	N/A	Adjustable from 0.5 to 2.5ml per 80cm <sup>2</sup> per hour

	S300ip Test Chamber Performance		
	Temperature Range	Humidity Range	Salt Spray Fallout rates
Salt Spray Mode	Adjustable from Ambient to +50°C /+122°F	N/A	Adjustable from 0.5 to 2.5ml per 80cm <sup>2</sup> per hour
Wetting Mode	Adjustable from Ambient to +50°C /+122°F	Fixed at 95% - 100% RH	N/A
Drying Mode	Adjustable from Ambient to +50°C /+122°F	Uncontrolled	N/A
Ambient Air Drying Mode	Alters to laboratory ambient conditions	Alters to laboratory ambient conditions	N/A

	CC300ip Test Chamber Performance		
	Temperature Range	Humidity Range	Salt Spray Fallout rates
Salt Spray Mode	Adjustable from Ambient to +60°C /+140°F	N/A	Adjustable from 0.5 to 2.5ml per 80cm² per hour
Wetting Mode	Adjustable from Ambient to +70°C /+158°F	Fixed at 95% - 100% RH	N/A
Drying Mode	Adjustable from Ambient to +70°C /+158°F	Uncontrolled	N/A
Ambient Air Drying Mode	Alters to laboratory ambient conditions	Alters to laboratory ambient conditions	N/A
Climatic Mode	See adjacent graph	See adjacent graph	N/A



# **Optional** Accessories

# **CCT Tests**

A wide range of optional accessories available for fitting to CCT chambers and above as designated below to extend the testing capabilities.

# ACC29/31 – Refrigeration & Humidity Control Unit



This option comprises of an integrated air temperature and humidity conditioning unit (ATCU), capable of refrigerating a cyclic chamber to -20°C.

The ATCU is connected to the CCT chamber by corrosion resistant insulated rigid and inlet/outlet connections. The inlet/outlet connections will be opened automatically by the CCT chambers programmable control system, whenever conditioned air

is required. The ATCU air circulation fan will also start, and will rapidly circulate the air between the ATCU and the CCT chamber. The inlet/ outlet connections will be automatically closed at all other times to minimise the exposure of the ATCU to the corrosive atmosphere inside the CCT chamber.

The requirement for compressed air is 240L/Min.

# ACC46 – SO2 Gas Dosing Facility



An SO2 gas dosing facility comprising of a chamber mounted dispersion tube, through which SO2 gas can be introduced into the chamber environment, at a rate determined by the setting of a user adjustable control valve and monitored by reference to a flowmeter.

The flow of gas into the chamber can be switched on and off automatically, at user programmable times, using the chambers standard touch screen control panel. This optional accessory is designed to enable chambers to meet the test requirements of ASTM G85 annex A4, and similar international test standards.

#### Notes:

1. This option cannot be fitted to chambers equipped with ACC10, ACC20 & ACC92 optional accessories.

2. The provision of the SO2 gas cylinder and the connector/regulator for this cylinder is the user's responsibility and is not included as a part of this optional accessory.

Salt Spray (iS)	Salt Spray (iP)	Cyclic(CCT)	
	•	•	

# ACC47 – Heated Blower Add On



• Enables a rapid transition from salt spray at +35°C to drying at +70°C within 30 minutes

The blower heater assists in increasing and decreasing the chamber temperature and also decreasing humidity process values, which is a requirement of test standards such as JASO M609, CCT-1, and IEC 60068-2-52. This is achieved by introducing ambient air from the local area in which the equipment is located by means of a forced air blower and ball valve.

# ACC42 – Wall Wash Facility



This option comprises of a water spray system to automatically wash the walls with water for a user adjustable number of minutes, at programmable points within a corrosion test cycle.

It is used when rapid cooling is required for JASO M 609, CCT-1, IEC 60068-2-52 and many other test standards.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)	Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
		•			•



- ▲ Fitted as standard on -20c & -40c chamber models.
- Available as Factory Fit optional accessory.
- Fitted as standard on Lite chamber versions.
- Fitted as standard on chamber.
- Available as separate optional accessory.

# **External Service Utilities**

A full range of accessories to enable chamber operation.

# ACC20 – Waste Water Trough & Pump System



A custom-made holding tank, which sits on the floor immediately behind the chamber, into which condensate from the chamber drain can be directed.

When the holding tank fills to a pre-determined

level, the condensate will automatically be pumped out by a low voltage marine specification pump, with power being supplied from the Ascott chamber via a panel mount socket and plug. This will discharge waste water to a remote drain or effluent tank located up to 10M/30ft away horizontally and up to 3M/10ft vertically.

3M of drain pipe is supplied with this accessory along with 3 x straight and 3 x 90-degree connectors. Dimensions 924 x 324 x 178mm (w x d x h).

#### Notes:

1. ACC20 is not suitable for chambers fitted with the SO2 gas dosing optional accessory (Ref.: ACC46) due to the possible existence of H2SO4 in the condensate which will give off SO2 gas if disturbed.

2. Although ideal for use with salt solution, ACC20 is not suited for use with acidic solutions as they may degrade the pump. If acidic solutions are used, the chamber should be regularly flushed with water so that the waste water collected within the holding tank is diluted. This will help to prolong the life of the pump.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACCO4 – Air Compressor



A free-standing compressor, providing a continuous supply of clean, dry and oil free compressed air, to enable the chamber to function without requiring connection to a local compressed air supply.

	ACC04/2	
Chamber Type	All models	
Output	300 L/Min displaced	
Free Air Delivery (FAD) @ 6 Bar	179 L/Min displaced	
Air Receiver	59 Litres	
Noise Output	74dB	

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACCO6 – Water Deioniser System



To provide water of suitable purity for topping up a salt spray/cyclic corrosion chamber air saturator, and for making up salt solution to be sprayed. Requires connection to a continuous mains water supply of maximum pressure 5.0 bar.

This system comprises of a regenerable cylinder deioniser and an electronic conductivity indicator.

The life expectancy figures given below represent the approximate total volume of water that can be deionised before cylinder exhaustion. These

figures are based upon a mains water input purity of 200ppm total dissolved solids.

There are 3 production variations as follows: ACC06/1 - Small @ 1500L ACC06/2 - Medium @ 2250L ACC06/3 - Large @ 4400L

**Note:** Due to the ongoing need for replacement/regeneration of water deionisers once exhausted, we recommend that these are sourced locally for non-UK customers.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC61 – Water Pressure Booster



An externally mounted water pump that can be used in order to boost the customer fed incoming water pressure. Typically used for the Wall wash optional accessory but can be adapted to suit other water fed systems.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•



- ▲ Fitted as standard on -20c & -40c chamber models.
- Available as Factory Fit optional accessory.
- Fitted as standard on Lite chamber versions.
- Fitted as standard on chamber.
- Available as separate optional accessory.

# ACC58 – Installation Kit



A kit of parts to allow connection between an Ascott corrosion chamber and user provided services.

Typical contents: 3 x 1m drain tubes + 3x couplers + 3X elbows 3 x 1m exhaust tube + 3x couplers + 3X elbows 6m 12mm Braided hose & hose clips 1 x 12mm Hosetail Tee

1 x 8mm alternative air coupler.

# ACC92 – Exhaust Salt Scrubber



The Ascott Scrubber unit is designed to remove highly corrosive salt fog from the chamber exhaust, in chamber installations where it is either not convenient or not possible to allow the chamber exhaust to ventilate freely to atmospheric pressure outside the building.

There are 4 versions available:

ACC92/1 - Non-Recirculating scrubber for salt spray chambers ACC92/2 - Non-Recirculating scrubber for Cyclic Corrosion chambers ACC92/3 - Recirculating scrubber for salt spray chambers ACC92/4 -Recirculating scrubber for Cyclic Corrosion chambers.

**Note:** While the unit is designed to remove salt fog from the chamber exhaust, it is not 'fail safe'. As with all corrosion chambers, there is a potential for salt fog to escape to the local environment. Corrosion chambers and scrubber units should not be positioned near equipment that would be adversely affected should this occur. This unit must never be used with chambers equipped with an SO2 gas dosing facility.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)	Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•	٠	•	•

# **Salt Solution Reservoirs**

Salt solution reservoirs of various sizes are available. 80L, 115L, 160L & 227L are wheeled, with a drain valve and can be fitted with Air Agitation and/or a low level alarm.

Note: Any model that includes the low level alarm must be ordered with the chamber as these cannot be retrofitted.

# **Air Agitation**



Air Agitation is designed to assist in dissolving salt into water, within an Ascott salt solution reservoir, to create a thoroughly mixed salt solution to be sprayed.

It achieves this by providing a regulated supply of compressed air which can be adjusted by the user, so that the air bubbles agitate and mix the salt solution continuously.

Note: This accessory requires connection to its own compressed air supply.

# ACC59/1 – Deluxe Salt Solution: Reservoir (Small)



An 80 Litre (21 US gal) capacity salt solution reservoir, with a graduated scale in litres, a hinged lid for ease of filling and cleaning and mounted on castors for mobility. External Dimensions:

460mm (w) x 620 mm (d) x 675mm (h).

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/5 – Deluxe Salt Solution: Reservoir (Medium)



A 115Litre (30US gal) capacity salt solution reservoir, with a graduated scale in litres, a hinged lid for ease of filling and cleaning and mounted on castors for mobility. External Dimensions:

560mm (w) x 620 mm (d) x 675mm (h).

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

ACC59/2 – Deluxe Salt Solution: Reservoir	r (Small)
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As ACC59/1, but with air agitation.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/3 – Deluxe Salt Solution: Reservoir (Small)

As ACC59/1, but with low level alarm.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/4 – Deluxe Salt Solution: Reservoir (Small)

#### As ACC59/1, but with low level alarm and air agitation.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/6 – Deluxe Salt Solution: Reservoir (Medium)

As ACC59/5, but with air agitation.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/7 – Deluxe Salt Solution: Reservoir (Medium)

#### As ACC59/5, but with low level alarm.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/8 – Deluxe Salt Solution: Reservoir (Medium)

As ACC59/5, but with low level alarm and air agitation.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# Low Level Alarm (Factory Fit Only)



This option provides a level sensor in the salt solution reservoir, which operates if the salt solution level falls below that required for approximately 18 hours of continuous salt spray testing at 1-2ml/hour fall-out rates.

The level sensor is wired into the chamber control system and will bring up an audible alarm and warning message in the display. If the reservoir is not refilled with 18 hours of this condition arising, the running chamber program, will automatically pause/stop.

# ACC59/9 – Deluxe Salt Solution: Reservoir (Large)



A160 Litre (42.2 US Gal) capacity salt solution reservoir, with a graduated scale in litres, a hinging lid for ease of filling and cleaning and mounted on castors for mobility.

External Dimensions: 840mm (w) x 500mm (d) x 790mm (h).

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/10 – Deluxe Salt Solution: Reservoir (Large)

As ACC59/9, but with air agitation.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/11 – Deluxe Salt Solution: Reservoir (Large)

As ACC59/9, but with low level alarm.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/12 – Deluxe Salt Solution: Reservoir (Large)

As ACC59/9, but with low level alarm and air agitation.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/16 – Deluxe Salt Solution: Reservoir (Extra Large)



A 227 Litre (59.9 US Gal) capacity salt solution reservoir, with a graduated scale in litres, a hinged lid for ease of filling and cleaning and mounted on castors for mobility.

External size: 830mm (w) x 640mm (d) x 740mm (h).

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/17 – Deluxe Salt Solution: Reservoir (Extra Large)

#### As ACC59/16, but with air agitation.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/18 – Deluxe Salt Solution: Reservoir (Extra Large)

As ACC59/16, but with low level alarm.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/19 – Deluxe Salt Solution: Reservoir (Extra Large)

As ACC59/16, but with low level alarm and air agitation.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/14 – Basic Salt Solution Reservoir (Small)



A 73Litre (19 US gal) capacity External salt solution reservoir & lid for ease of filling and cleaning. Graduated scale in litres. 1 supplied as standard with each 450L chamber.

Can be mobile and mounted on castors for mobility when purchased with ACC59/15 Salt Solution Reservoir Dolly.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/13 – Basic Salt Solution Reservoir (Medium)



A 90 Litre (23.7 US Gal) capacity External salt solution reservoir & lid for ease of filling and cleaning. Graduated scale in litres.

1 supplied as standard with each 1000L and above chamber. Can be mobile and mounted on castors for mobility when purchased with ACC59/15 Salt Solution Reservoir Dolly.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC59/15 – Salt Solution Reservoir (73-90L) Dolly



A Dolly for 73Litre (19 US gal) and 90L (23 US gal) external salt solution reservoir.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# Sample Preparation & Measurement

Equipment to assist in the preparation of samples and measuring and assessment of testing.

# ACC36 – Re-transmission of temperature and humidity signals



Re-transmission of the actual chamber temperature θ humidity as 2 x 0-10VDC signals via a chamber externally mounted socket (mating plug provided). For wiring to remote data logging equipment provided by the user.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
	•	•

# ACC28 – Handheld Humidity and Temperature Probe



A separate free-standing battery powered data logger, connected to a remote temperature and humidity sensor probe via a 2m long extension cable. The data logger will continuously log the temperature and humidity seen by the probe, for up to 5000 samples of each value, with a user

programmable measurement interval adjustable from 15 seconds to 2 hours. The range of temperature and humidity that can be logged is -40 to +85C and 0 to 100%RH. Software is also provided which, when installed on a user's PC, enables the data logger to be programmed, and logged data to be retrieved and displayed.

Note: Chamber must be fitted with an optional entry port (ref. ACC10 to enable the logger probe to be introduced into the chamber interior.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC11 – Handheld pH Meter



Handheld, battery powered digital pH meter, for the measurement of pH of the salt fog fallout over the range 0-14 with a resolution of 0.01 pH. The meter is provided with manual temperature compensation, slope, and calibration controls. Supplied complete with buffer solutions for calibration.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC49 – Sikkens® Scratch Tool



Meets Standards: ISO 17872 (acc. to DIN 9227) & ISO 12944-6. This scratching tool is specially designed to perform scribes on coated steel panels or test substrates prior to salt spray testing. As standard, the scratch tool is supplied with 3 tungsten carbide cutting blades:

- •1 blade @ 0.5mm thick, the Daimler Chrysler version
- $\cdot$  1 blade @ 1mm thick, the original Sikkens® version
- •1 blade @ 2mm thick, requirement for 2018 update of ISO 12944-6.

The blade is positioned by an adjustable guide block to assist cutting a straight line. The guide block can be easily adjusted using the Allen keys provided. The tool features a soft grip ergonomically designed handle for ease of use and is supplied in a carry case.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC50 – Temperature Data Logger



A battery powered mini data logger, that continuously records the chamber air temperature (deg' C), via a temperature sensor to which it is connected.

The temperatures logged can then be downloaded to a separate computer running appropriate software, which is available as a free download from the manufacturers' website. The external and internal temperatures are independently displayed on the logger.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC108 – Fallout Measuring Kit



Comprises of 4 x 100ml measuring cylinders and 4 x 100mm / 4" funnels, for manually collecting and measuring salt spray fall-out inside a chamber, during salt spray testing.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC126 – Electrical Resistance Meter



This accessory allows the chamber to monitor and record the electrical resistance of 8 samples over time while they are actively being tested.

The measurement range of resistance per sample is from 0 to 8000 ohms. The measurement sample time is approximately 10 seconds. Data can be logged for inspection using Ascott's ACC121 logging software. The accessory includes 8 sets of cables and connectors.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
	•	•

# ACC121 – Data Logging Software



This software allows remote logging of chamber variables and editing of chamber programs. The software communicates via an Ethernet network adaptor from chamber to PC / Laptop. The Workstation

/ Laptop also requires a USB port to load the software and to accommodate the Dongle that is needed to run this software.

It can be loaded on Workstations or Laptops with Microsoft's Windows 10 Operating system. It also requires the following minimum hardware requirements - 1 GHz Processor minimum Processor, 1 GB RAM, video 1280 x 1024 (high colour 16 bit) and it is advised 2GB Hard Disk Space for data.

This software is suitable for logging a maximum of 3 chambers at any one time, providing all chambers are connected to the same network, either via an Ethernet hub or router.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
	•	•

# ACC100 – Handheld Salinity Refractometer



A refractometer measures refractive index to accurately determine the concentration of one substance when dissolved in another, for example, the 5% concentration of salt (Sodium Chloride) in water, which is required by most salt spray test standards.

Our salinity refractometer has been optimised to give a direct reading of percentage Sodium Chloride in the range 0 to 28%, with automatic temperature compensation. It is convenient to use, as a single drop of the salt solution to be measured is placed on the viewing window, using the pipette supplied, and its salinity read against a high contrast scale, graduated in % Sodium Chloride, to give an accurate reading.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC114 – SIM Card Connectivity



Equips the chamber with a SIM card reader, integrated into the chamber control system but accessible to the chamber user. The chamber user then procures a SIM card from a local mobile phone service provider (of the same type as used in mobile phones) and inserts this into the SIM card reader themselves.

The user can then program the chamber, via the front panel controller, to use the SIM card reader to send preset text messages to phone numbers of the user's choice, should predetermined conditions arise in the chamber. For example, the user could program the chamber to send him/her a text message alerting them if a predetermined alarm condition has been triggered.

**Note:** The SIM card itself is not included and must be sourced separately from a local mobile telecoms service provider. The cost of data transmission is for the user's account.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
	•	•

# ACC132 – Portable SO2 Gas detector with docking charger



A portable, rechargeable SO2 gas detector. 1 button operation.

Alarm default - SO2 gas at 1ppm.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
	•	•

# ACC128 – Wall Mounted SO2 Gas Detector



A high specification, wall mounted SO2 gas detector. Ideally suited for connection to laboratory monitoring systems.

TXgard-IS+ is a loop-powered instrument providing a 4-20 mA signal suitable for direct connection to a control panel. Requires an 8-32V DC power supply. Alarm default – S02 Gas (a) 1pppm.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
	•	•

# ACC127 – Portable, Disposable SO2 Gas Detector



A portable, disposable SO2 gas detector. Battery life up to 2 years. 1 button operation. Alarm default - SO2 gas at 1ppm.

	Salt Spray (IS)	Salt Spray (IP)	LYCIIC (LLI)
		•	•
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# **Additional Chamber Fittings**

A range of additional fittings and accessories.

# ACCO5 – Guardian Angel System



The Guardian Angel comprises a modular light alarm that can be fitted to the top of all Ascott iP chambers. When the chamber is in daily use in the laboratory it allows the occupants of the area to see the status of the chamber visually at a distance depending on the colour of the status light.

**GREEN** Everything is operating correctly.

- AMBER The chamber has a small problem which will eventually need attention but is still operational.
- **RED** The chamber operation has been stopped and needs immediate attention.

Three different variants of the light alarm are available,

the standard version, a USB connected version, and an Ethernet connected version. The USB and Ethernet versions can be remotely monitored on a PC with the use of software supplied with the system, this software also supports e-mail notification when an alarm is triggered. Should a standard system be purchased which the operator wishes to connect in the future, upgrade packs are also available.

Product Code Description:

- ACC05/1 Guardian Angel System LED version
- ACC05/2 Guardian Angel System LED with USB connectivity version
- ACC05/3 Guardian Angel System LED with Ethernet connectivity
- ACC05/4 Guardian Angel System USB add on unit only
- ACC05/5 Guardian Angel System Ethernet add on unit only.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
	•	•

# ACC10 – Entry Port



A 35mm (1.27") diameter sealable chamber entry port. Passes through the left-hand wall of the chamber to enable the connection of external monitoring/driving equipment to the load under test.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC26 – Interior Lighting



This option illuminates the chamber interior, when a pushbutton switch on the control panel is operated by the user.

Touching it once turns the chamber interior illumination on for 10 minutes. It then turns off automatically. Touching the icon again will turn off the interior illumination.

**Note:** Interior illumination cannot be supplied with chambers equipped with optional accessory ACC29/37.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC07 – Two Button Canopy Control



Two button canopy operation ensures that the user must stand to the side of the chamber and use both hands in order to operate the pneumatically actuated canopy.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
٠	•	•

# ACC51 – Sip Humidity Sensor



A precision capacitive Relative Humidity probe fitted within the chamber. Complete with protective air curtain facility.

This allows salt spray IP chambers to display the relative humidity during air drying or condensation humidity modes if required.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
	•	

# ACC66 – Manual Filling Air Saturator



As standard, all Ascott chamber air saturators are designed to fill themselves automatically, provided the chamber is connected to a continuous pressurised supply of suitable water.

If such a supply is not available, then selecting this optional accessory will enable the air saturator to be manually filled and periodically topped up with water by hand.

Note: This is only possible when salt spray testing. Adds 75mm/3" to external chamber width.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC78 – User Programmable Output Signal



This option enables the chamber user to have their own remote electrical equipment switched on/off at user programmable times, during a running test program. The output is provided via a voltage free

change over contact (3A rated at 30VDC/250VAC) terminated at a chamber mounted 3-pin plug and socket for the user to wire to.

There are 10 user settable time events, up to a maximum time of 9999 hours and 59 minutes.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)	Salt Spray (iS)	Salt Spray (iP)	Cycl
		•	•	•	

# **Sample Racks and Supports**

Whatever the size, weight, or shape of your samples, we have a solution to suit.

#### ACC15 – Mesh Racking



Mesh type racking with an aperture of 30mm for testing small component parts. Locates on either the upper or lower level supports provided as standard inside the chamber, and removable if required. This product is available in a variety of sizes to suit different capacity chambers.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC16 – Slotted Sample Racks



Removable slotted type sample rack for testing panels/coupons. These sample racks are available in a variety of lengths to suit different sizes of chamber, and to suit the upper and lower sample rack mounting positions provided in floor standing chambers.

Each rack has slots 1/8"/3mm wide, angled at 15 degrees from vertical. Special racks with wider slots are available on request.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC94 – Quick Release Compressed Air Coupling



A control panel mounted, quick release, compressed air coupling, to allow independent verification of the air pressure gauge fitted as standard to Ascott chambers, for calibration purposes.

The coupling comprises of a socket type receptacle fitted to the control panel, with integral one-way check valve, and a removable mating plug. The mating plug will accept 4mm (outside diameter) push-fit compressed air hose, for connection to the verification instrumentation (not supplied).

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

#### ACC106 – Atomiser Airflow Optimiser



This comprises of an anemometer for measuring airflow and a mounting for this, which positions it at a fixed distance from the end of the salt spray atomiser.

This allows the airflow to be measured and if necessary adjusted. Consistent airflow at the atomiser can be a significant factor in obtaining good salt spray fall-out homogeneity.

Cyclic (CCT)	Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•	•

# ACC17 – Rod Sample Racks



Removable rod type sample rack. Can be used for suspending small test samples hung beneath, or for supporting larger test samples placed on top of at least 2 rod type sample racks, situated adjacent to each other inside the chamber.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC18 – Spiked Sample Racks



Removable spiked type sample rack. Can be used to suspend test samples from the 10mm/0.4" diameter x 55mm/2" long spikes, which are equally spaced and protrude from 2 opposite sides of the rack.

This product is available in a variety of sizes to suit different capacity chambers.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# Service, Spares and Consumables

Kits to help you maintain your Ascott Chamber together with consumables that will be required for operation.

# ACC57/1 – 12 Month Consumables Kit



A consumables spares kit for an Ascott salt spray test chamber. The items supplied should be sufficient for up to 1 year.

**Note:** A consumables spares kit is supplied as standard with every new chamber.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•		

# ACC57/2 – 12 Month Consumables Kit



A consumables spares kit for an Ascott standard 'IP' Premium salt spray chamber and Cyclic Corrosion Chambers. The items supplied should be sufficient for up to 1 year.

**Note:** A consumables spares kit is supplied as standard with every new chamber.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
	•	•

# ACC12/2 – 36 Month Service & Spares Kit



An initial kit of spare parts for servicing and maintaining an Ascott salt spray 'IP' or cyclic corrosion test chamber, for up to 3 years from its first use.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

#### ACC131 – CR4 Grade Steel Corrosion Test Coupon



Ascott CR4 Steel Test panels are used to check the reproducibility and repeatability of the test results for Salt Spray or Cyclic Corrosion Test Chambers, before being used to run ISO 9227.

- Material Type: Cold Rolled Steel CR4.
- Size: 70mm x 150mm (+/- 0.2mm).
- Thickness: 1mm (+/- 0.2mm).
- Pack Quantity: 20.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

#### SALA530 – Corrosalt



- Highest purity salt for fully compliant testing.
- For all salt spray testing including the stringent ASTM B117.
  Available in 25Kg (55Ib) drums.
- Drums are supplied with a scoop to maintain purity when handling.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•

# ACC12/3 – 72 Month Service & Spares Kit



A comprehensive kit of spare parts for servicing and maintaining an Ascott salt spray IP or cyclic corrosion test chamber, for up to 6 years from its first use, or it's last service.

Salt Spray (iS)	Salt Spray (iP)	Cyclic (CCT)
•	•	•



▲ Fitted as standard on -20c & -40c chamber models.

Available as Factory Fit optional accessory.

Fitted as standard on Lite chamber versions.

- Fitted as standard on chamber.
- Available as separate optional accessory.

# **Technical Specification**

Item	Description
Chamber Capacity	300Ltrs / 10.5cu ft
Chamber Weight	340kg / 749lbs
Chamber Load Threshold	1100mm / 43.3"
Chamber External Dimensions	1450 x 769 x 2010mm / 57 x 30 x 80" (w x d x h)
Chamber Internal Dimensions	855 x 601 x 711mm reducing to 407mm (w x d x h) 34" x 24" x 27" reducing to 16"
Roof Design	Angled interior roof to avoid droplets.
Mounting Format	Floor Standing.
Chamber Construction	Glass Reinforced Plastic, Polypropylene, PVC Parts.
Electricity Supply	Voltage (VAC) and frequency (Hz) dependant on country/region of installation.
Water	Water section on page 14 needs correcting to: Deionized/distilled for topping up air saturator and making salt solution. Air saturator requires a continuous water connection 2.5-5.0 bar (36-72 psi). If ACC42 is ordered the continuous water supply must be pressurised 4.0 – 5.0 bar (58-72 psi). If air saturator is topped up manually option ACC66 must be ordered.
Air	Clean dry & oil free compressed air, 4.0 to 6.0 bar (58-87psi) with 440 Ltrs (15.5cu.ft) per minute flow.
Exhaust	3m (10ft) exhaust pipe is required which should be terminated outside building (see accessory ACC58).
Drain	3m (10ft) drain pipe is required which should be terminated into floor level drain (see accessory ACC58).
Operating Environment Conditions	Indoors, with ambient maintained at +18 to +23°C (+64 to 73°F), 85% max RH (non-condensing).
Canopy Colour	9 Standard colours to choose from, others available on request (see below).



# Inspected Tested Measured Approved

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