

SlidaScope™

Sliding Drawer Scope Drying Cabinet



FEATURES:

- Endoscope capacity = 8 (suits flexible scopes)
- Suitable for long scopes
- X-ray or standard pass through options
- HEPA Filtered Air Drying - Independent air supply via Shared Air Box (for up to 2 cabinets); or
- Remote Air Generator for multiple cabinets
- Vacuum channel drying reduces hook-up cross contamination
- Small footprint: 600mm(w) x 600mm(d) x 1810mm(h) Height excluding Shared Air Box. 2140 (h) Inclusive of SAB
- Hygienic acrylic cabinet construction
- Interlocking RFID door locks
- Airflow, temperature, pressure and humidity monitoring and reporting per EN16442 Standards
- RFID Scope Data Monitoring and Display:
 - Countdown timers for each scope.
 - Electronic data backup and integration to other software packages via CSV or MySQL.
 - Live view of cabinets via software
- Data management system allows printing of labels to report scope status, cabinet cleaning status, error status
- Discrete lighting indicates cabinet hygiene status and prompts when cleaning or service is required
- Scope validation label with 'Expiry Date and Time' information for Washer to Patient validation
- Air connectors and vacuum hose kits supplied (eight sets including scope connectors)
- 12 - 168 hours storage time – configurable

CONTENTS

CONTENTS	2
NOTICE AND DECLARATION	5
PREFACE	6
EN16442 COMPLIANCE REQUIREMENTS	6
CABINET OVERVIEW	7
Door Opening Directions and Door Style Selection	8
Interlocking	8
AIR OPTIONS.....	9
Benefits of Shared Air System	10
Benefits of Vacuum Through Channels	14
CABINET SPECIFICATIONS.....	15
Cabinet Conditions	16
Quick Reference Specifications Table	18
OPERATION INSTRUCTIONS	22
Before Storage	24
Storing a Scope	24
Connecting Vacuum to a Scope:	25
DATA SYSTEM.....	27
Data System Overview	28
Count Down Timers	29
Scope and Staff Tags	29
Tag Programmer	30
Washer Station	31
Sequence for Washing Scope: Who, What, Where	32
Adding and Removing Scopes From the Cabinet	32

Printer Station	32
Replacing Labels	33
Laptop Kit	34
PC Operating Systems	34
Software – Installed onto Laptop	35
Positions of Components and Cable Distances	36
Closed Network – TCP/IP	36
Cabinet Reset Button	37
Printing Labels	38
INSTALLATION REQUIREMENTS	39
Information to Gather	40
Room Layouts, Ceiling Heights and Wall Construction	40
Bulkhead	42
Access and Route for Install	43
Lifts / Stairwells	43
Install Dates, Work Hours	43
Power Needs	43
STAFF TRAINING AND EDUCATION	44
Standard Workflow	45
Cabinet Reporting Conditions	46
Cabinet Light Colour Key	47
In-Service Training For Site	48
Additional Training and Setup	48
MAINTENANCE AND CLEANING	49
Air Lines	50
Hook-ups (Cleaning Adaptors)	50

Baskets	50
Cleaning	50
Internal Surfaces	50
Exterior Surfaces	50
Cleaning Data Validation	51
SAFETY	52
Safe Operating Procedure	52
Pre-Start Checks	52
Turning On the Cabinet	52
Maintenance Contracts	53
Compliance	53
TROUBLESHOOTING	54
PHYSICAL TESTS AND CHECKS	55
Air Flow Check	55
Endoscope Condition Check	55
Power Outages	55
ANNEX A – VALIDATED SCOPES FOR STORAGE	56
Validated Scopes Overview	56
Olympus Colonoscopes	56
Olympus Gastroscopes	59
Olympus Duodenoscopes	61
Olympus Bronchoscopes	61
Pentax Scopes	62
Fujinon Scopes	64
ANNEX B - INSTRUCTIONS FOR USE – ENDOSCOPE HOSE KIT CLEANING	65
Manual Cleaning	66

Batch Washers67

Sterilising for Sterile Storage.....67

NOTICE AND DECLARATION

This manual and any examples or images contained herein are provided “as is” and are subject to change without notice. Smartline Machinery makes no warranty of any kind regarding this manual, including, but not limited to, the implied warranties of merchantability, non-infringement and fitness for a particular purpose.

Smartline Machinery shall not be liable for any errors or for consequential damages in connection with the furnishing, performance, or use of this manual or the examples contained herein.

© 2017, Smartline Machinery

Product designed and manufactured by Smartline Machinery Pty. Ltd.
PO Box 532, Buderim, Qld 4556
Australia

Distributor Details:

PREFACE

Products made by Smartline Machinery Pty Ltd are designed to meet specific needs in the healthcare industry and we manufacture in Australia under ISO 9001 quality system standards. Before our products leave the factory, they undergo quality assurance testing to ensure that they meet our quality standards. Should you experience problems with this product, please contact us for support or repairs.

This User Manual covers the installation, general use and maintenance of the SlidaScope™ Scope Drying Cabinet designed and supplied by Smartline Machinery or approved distributors.

In countries outside Australia, our products are supported by local distributors which are always ready to help you. See Distributor details on Page 5.

If the local distributor is unable to assist you, forward your support requests to Smartline Machinery at tech@smartlinemachinery.com

This product has been designed to dry and store up to eight flexible Endoscopes. The construction and assembly is configured to do so reliably and effectively in conjunction with European and Australian Standards and Guidelines.

Number of Scopes stored per cabinet: 8 Endoscopes. Capable of storing Gastrosopes, Colonoscopes, Bronchoscopes, Duodenoscopes, EUS Scopes, Enteroscopes, ENT Scopes and more of most brands.

EN16442 COMPLIANCE REQUIREMENTS

Continuous monitored air-drying cabinets complying with European Standard EN 16442:2015 – for drying Thermoliable Endoscopes. Globally this standard currently represents the highest documented level indicating best practice of Scope storage at time of publication of this document.

EN16442 requires the cabinet to monitor, report and print various parameters including airflow status indication, cabinet pressure, temperature, humidity, door open parameters and power outages.

All events are logged in the Data Management System for log retrieval and reporting

Maintenance: It is an operational requirement to have an up-to-date Maintenance Contract in place.

Validation: To maintain the accuracy of the environment monitoring equipment, the system needs to be recalibrated and checked annually by an approved service agent. A Certificate of Compliance will be issued upon each annual recalibration. A Validation Contract is separate to a Maintenance Contract and is also an operational requirement.

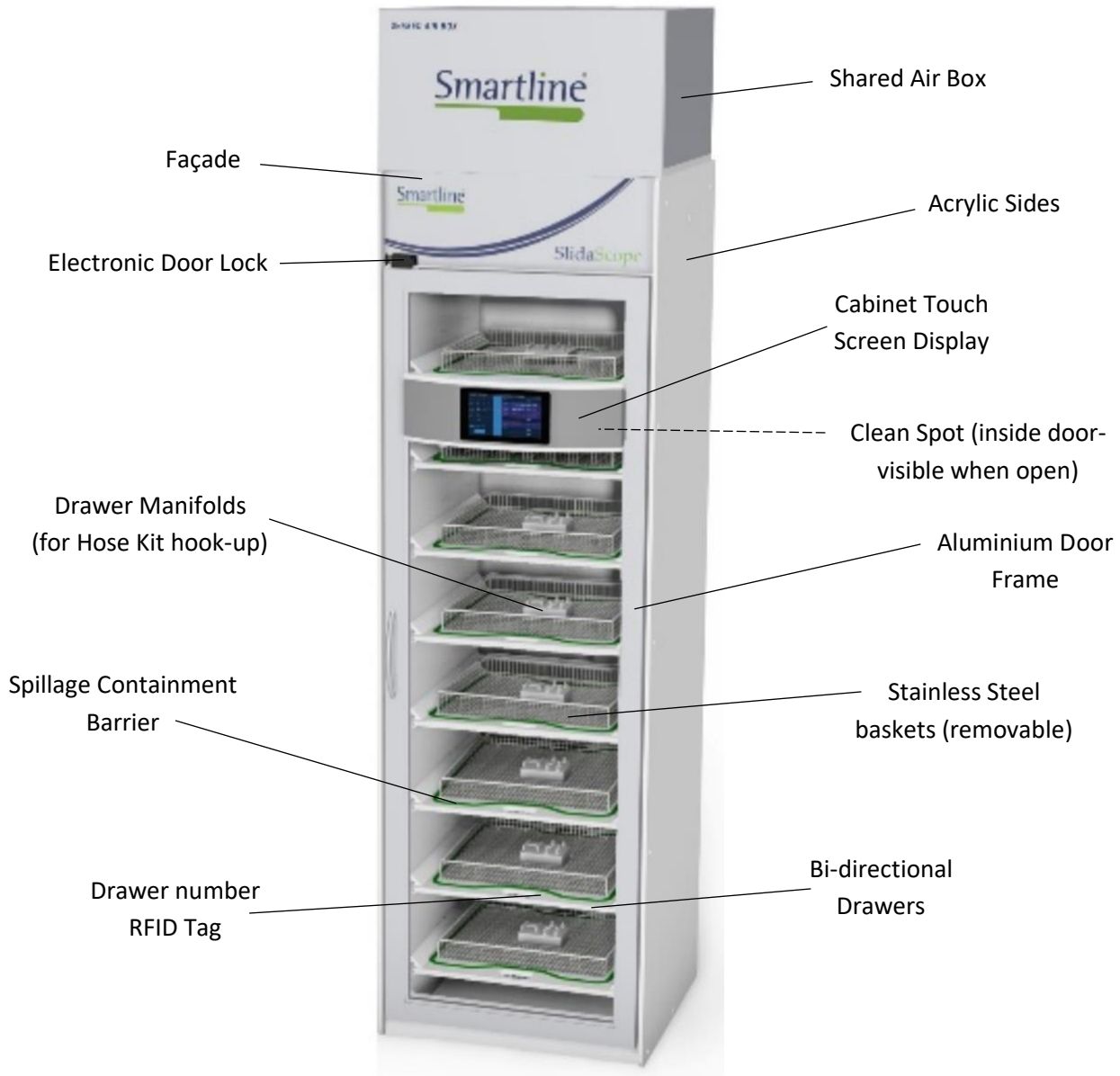
SlidaScope™ Cabinets meet current 2017 GENCA Guidelines and Position Statement March 2017 and are Compliant with EN16442.

Australia: According to the GENCA Position Statement, March 2017, all cabinets must comply with EN16442 by December 2020.

This product is TGA listed – Article ARTG 140018. According to GESA/GENCA/ACIPC August 2017, “Statement 7a, “All endoscopic instruments, except those in sterile packaging, should be stored in TGA-approved forced air-drying cabinets”. And Statement 7b, “Endoscopes stored in TGA-approved forced-air drying cabinets may be used for a period of up to 7 days without reprocessing, unless otherwise stated by the manufacturer.

SlidaScope™

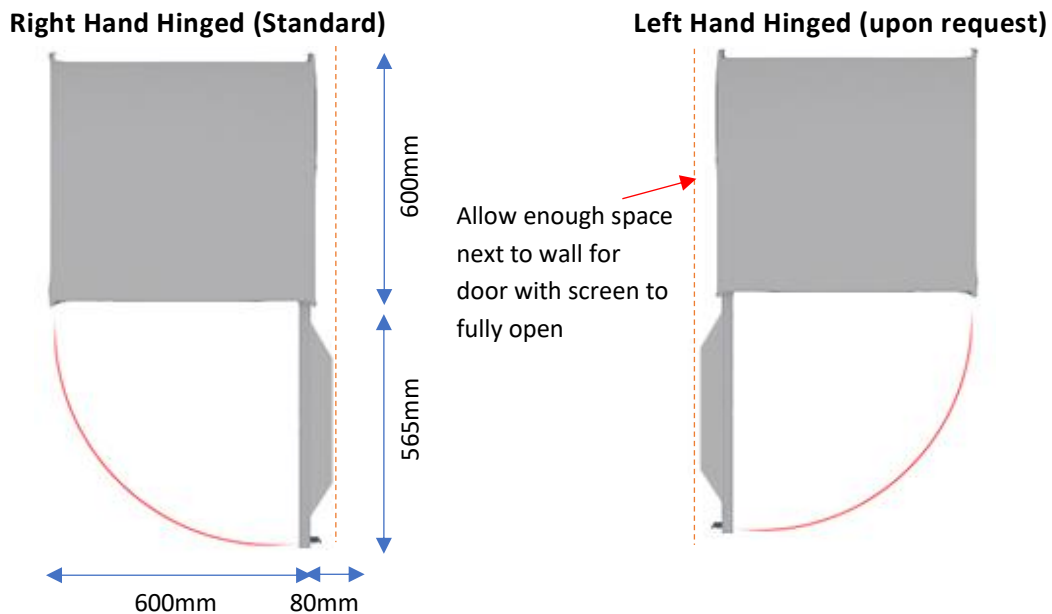
CABINET OVERVIEW



MAN-0910 SlidaScope Cabinet
 RELEASE DATE: 01/2020 Model:
 09.DC-B

DOOR OPENING DIRECTIONS AND DOOR STYLE SELECTION

SlidaScope™ Cabinets come standard with doors hinged on the right. If there is a requirement that doors be hinged on the left, this needs to be shown in the room layout drawings and be noted on all documentation. It is very important that this information is detailed in the quoting stage, as although it is possible for the doors to be changed onsite, the client will incur additional charges if changes were not requested in the original specification.

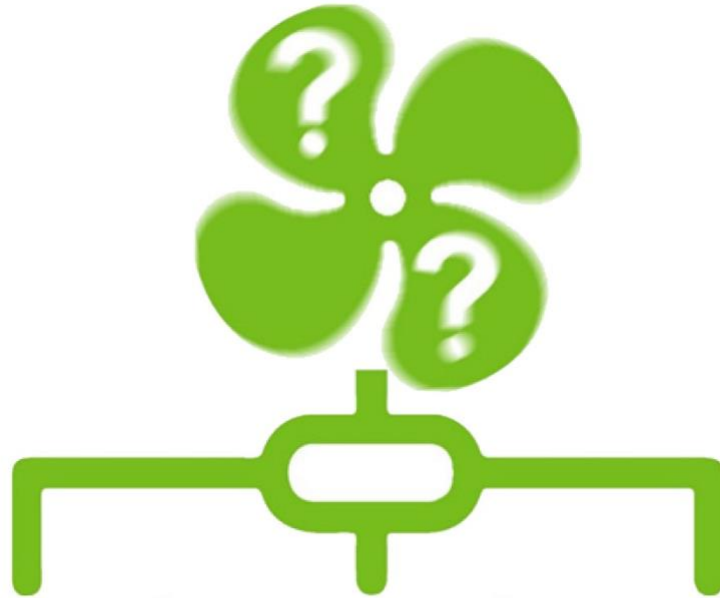


INTERLOCKING

If the selected SlidaScope™ Cabinet is of the pass-through variety, the standard door locking mechanism will prevent both doors from being open at the same time. This interlocking function will therefore prevent air from passing between the cleaning and procedure rooms.

SlidaScope™

AIR OPTIONS

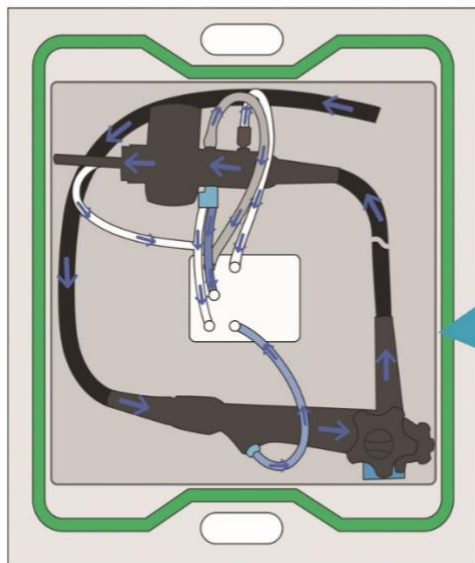


MAN-0910 SlidaScope Cabinet
RELEASE DATE: 01/2020 Model:
09.DC-B

BENEFITS OF SHARED AIR SYSTEM

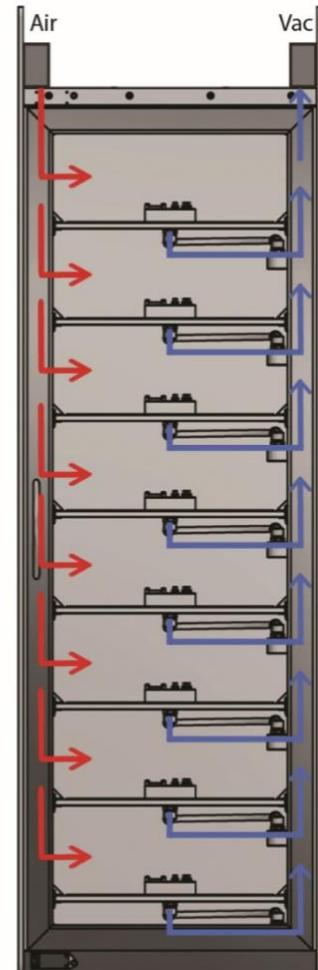
The cabinet will provide an environment fit for drying qualified scopes stored inside.

**Vacuum into drawer manifold
(each drawer has vacuum running to SAB)**



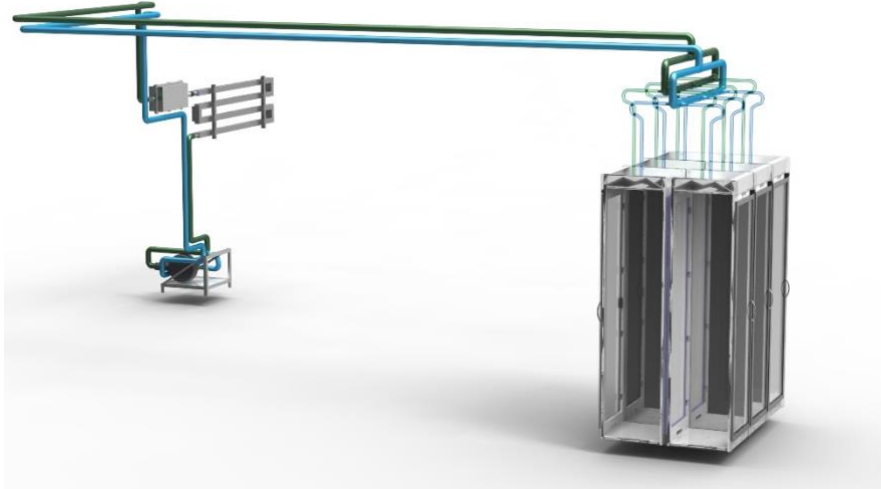
Top view of drawer with scope connected to manifold

■ Vacuum
■ Air



There are two options for the air generation for the SlidaScope™ Cabinet. Both options are an inexpensive air supply and do NOT connect to the hospital, medical grade, air supply. Low servicing costs of filters (annually) and pumps (bi-annually) creates a cost-effective solution to airflow.

1. Remote Air System (Multiple Cabinets Use – Each site needs independent evaluation)



The Remote Air System can service 1 -7 cabinets and will require air ducting from the pump system (Remote Air Generator) to the cabinets. The largest pump will require a 3-Phase power source.

2. Shared Air Box (Most common scenario)

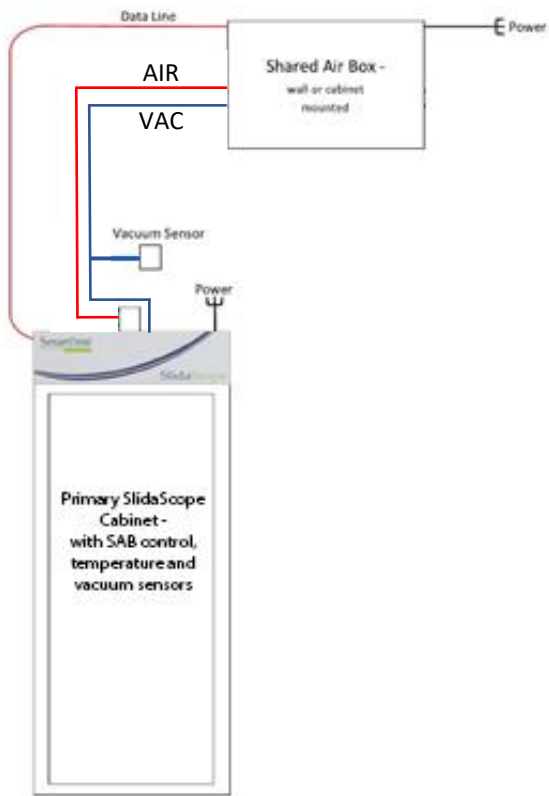
The Shared Air Box can be positioned on top of a SlidaScope™ Cabinet if the ceiling height is 2400mm. Alternatively, it can be wall mounted using the SAB Wall Mounting Kit (09.SC-SB -WMK).

If a wall mount kit is used, there is a possibility that a 5-10 metre hose extension kit will be required to connect the SAB to the SlidaScope™ Cabinet. Similarly, a hose extension kit may be required to connect air to the secondary SlidaScope™ Cabinet if positioned up to 10m away from the primary cabinet that holds the SAB.

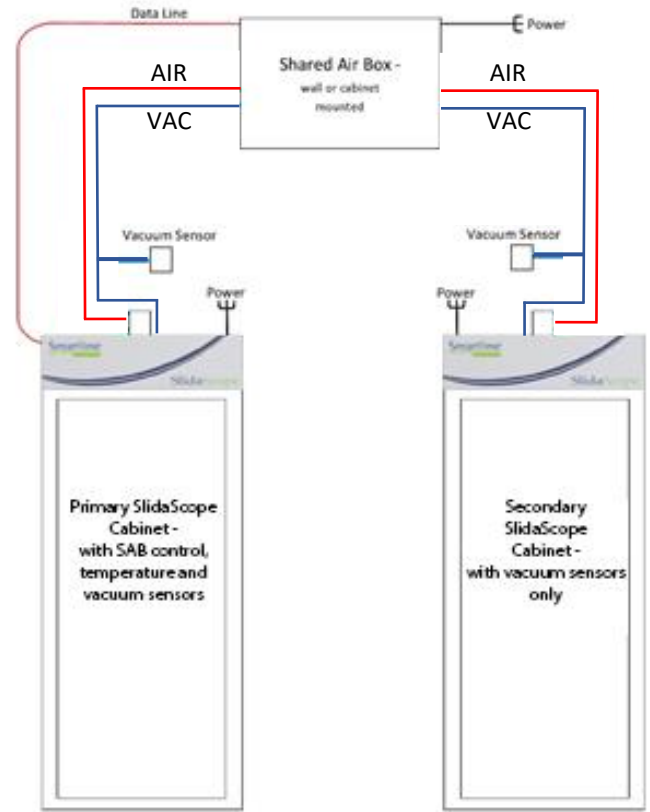
Shared Air Box

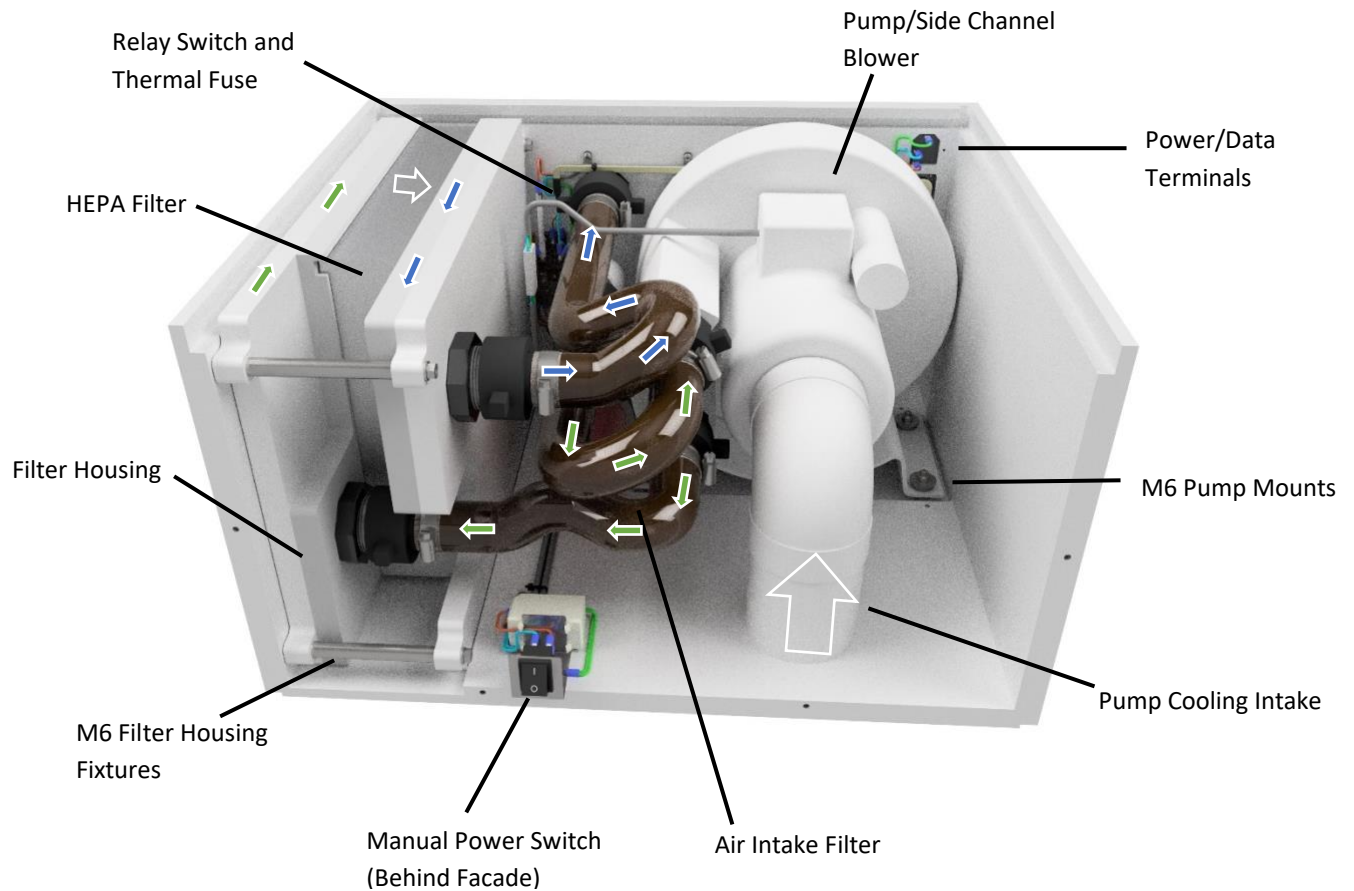


Single cabinet install schematic





Double cabinet install schematic





-Note: Top and Front plate, not shown.

 = Airflow into HEPA Filter

 = Airflow out of HEPA Filter

The Shared Air Box (09.SAB) will generate HEPA Filtered air and vacuum for up to two cabinets.

The Shared Air Box is located with the cabinets (no plumbing or construction work required)

The ongoing costs of this product is low and only requires basic servicing.

The following table details replacement parts:

QUANTITY OF CABINETS (One system can service two cabinets)

	Year	1 Cabinet	2 Cabinets	3 Cabinets	4 Cabinets	5 Cabinets
FILTER REPLACEMENT	1	1x	1x	2x	2x	3x Filters
	2	1x	1x	2x	2x	3x
	3	1x	1x	2x	2x	3x
	4	1x	1x	2x	2x	3x
	5	1x	1x	2x	2x	3x
PUMP REPLACEMENT						
	1	N/A	N/A	N/A	N/A	N/A
	2	1x	1x	2x	2x	3x Pumps
	3	N/A	N/A	N/A	N/A	N/A
	4	1x	1x	2x	2x	3x
	5	N/A	N/A	N/A	N/A	N/A

BENEFITS OF VACUUM THROUGH CHANNELS

The SlidaScope™ Cabinet uses vacuum which ensures enough airflow passes through each endoscope channel to assist with drying the internal surfaces. The clean HEPA Filtered air is passed into the cabinet and across each scope, the air is pulled through the distil tip of the scope and returns through the various hook-up manifolds.

SlidaScope™

CABINET SPECIFICATIONS



MAN-0910 SlidaScope Cabinet
RELEASE DATE: 01/2020 Model:
09.DC-B

15

+61 7 5478 9977
www.SmartlineMedical.com
P.O. Box 532, Buderim Qld 4556
55 Cordwell Road, Yandina Q 4561
+61 7 5478 8854 ABN 34 119 209 611

CABINET CONDITIONS

Cabinet Mounted Touch Screen Interface

Slida 1 14:40 12/06/18			Scope View 9.34		Time Remaining	
	MIN	MAX				
Temp :	21.5	10	40	1	--:--	OoC:
Humid :	59.3	10	90	2	70:44	JF-140R Olympu OoC: 02:59
Air :	0.0	1	20	3	00:00	White Tube sco OoC: 00:00
Vacuum :	-46.5	-13000	-5000	4	00:00	MH553 Olympus OoC: 00:00
SAB Tmp:	20.7	0	55	5	--:--	OoC:
Door F :	Open			6	00:00	MAJ-1193 OoC: 00:00
Door R :	Closed			7	--:--	OoC:
Clean Due :	Sat 11-Apr 10:00			8	--:--	OoC:
CONTROL						

Sensor Status Key

- = Value out of range
- = Scope Storage details (Expired in RED)

The SlidaScope™ Environmental Monitor measures and records the following cabinet conditions:

- Temperature
- Humidity
- Air (Cabinet Pressure)
- Vacuum
- Door Status
- Shared Air Box Temp
- Routine Cleaning Status – Clean Due
- CONTROL – SAB and Alarm Status
- Scope Location Button – Detailed Storage Info

The air system automatically maintains a positive pressure within each cabinet. Having a positively pressured cabinet, minimises external airflow (cleaning room / theatre air) into the cabinet. All the Environmental Conditions are measured and recorded by the Data Management System as required to meet EN16442 Standards. If a deviant reading level is received (in the Warning or Alarm values of these conditions), the following will occur:

- An automatically generated printout identifies actions for Cabinet Clean Completed and Alarms



- Cabinet lighting will change colour (each fault has an assigned colour, see: Warnings and Alarms section)

Cabinet Mounted Touch Screen Control Screen



Sensor Status Key



= Alarm Acknowledge Button



= SAB on/off

Cabinet Mounted Touch Scope Storage Details Screen

MAIN	SCOPE DETAILS TRAY 2	
	REMAINING COUNT:	71:59
	Remaining Out Of Cabinet Time (OoC):	02:59
	Scope Type:	ENDOSCOPE
	Scope Name:	JF-140R Olympus
	Wash Station:	AER 3
	Scope TAG:	1363551789
	version: 06-June-2018	

QUICK REFERENCE SPECIFICATIONS TABLE

Topic	Answer	Notes
List of endoscopes that can be stored in the storage cabinet;	See: Approved Scope List.	Endoscope accessories (e.g. valves) can be stored inside the storage cabinet but it is not the intention of the storage cabinet to maintain the microbiological quality of these accessories.
Storage temperature band	10 – 40degC	
Maximum storage time	168hrs	7 days maximum storage
Drying function	N/A	Cabinet is not equipped with a drying function
Drying temperature band	N/A	Not Applicable as cabinet does not use elevated temperatures to dry load.
Time required to dry the endoscopes (if applicable)	3 Hours (MAX)	Dryness may be achieved in less than 3 hours
Automated channel flushing control	N/A	Automated channel flushing NOT used
Air Flow circulation diagram	See: USER Manuals	See: Benefits of Shared Air System RotaScope:Page 10 SlidaScope: Page 10
Cabinet Flow Rate (Ports at Manifold)	>1.0 l/m	Minimum detectable flow rate is .5 l/m
Cabinet Flow Rate (Total)	120 – 200 l/m	10x Air Exchanges p/h Minimum detectable flow rate is 20 l/m
Cabinet Pressure Band	-1– 27pa	Differential Pressure (above 27Pa is possible but not recorded.
Endoscopes that one or more channels is below the detection limit	N/A	Currently there are no endoscopes that can be stored in the cabinet that have a flow rate that is below the detectable flow rate of 1 l/min.
Air Quality	99.99% @30µm Filtration Rate (HEPA Filtered Supply Via SAB)	Third party air is not used by the storage cabinet. A Shared Air Box draws required air from the surrounding environment of which it is situated and therefore standard office working conditions need to be provided at all times. Room temperature range 10 C° to 30 C°, relative humidity between 40% and 70%, environmental room pressure greater than 102 kPa.
Humidity Band	3.0 – 90.0 %RH	
Oil Content	N/A	Compressed air not used
Air Quality Testing Frequency	Annually – Service	HEPA Filter replaced Annually
Cabinet Cleanliness Level	N/A	A specific cleanliness level is not claimed – Clinical Clean at commissioning/handover is required by HSO required
Cabinet Cleaning Limits	<168hrs	Weekly cleaning required for cabinet and accessories (Vacuum Hose Kits)
Cabinet Cleaning IFU	See: User Manual	See: Maintenance and Cleaning RotaScope: Page 47

		SlidaScope: Page 48
Accessory Cleaning IFU	See: Vacuum Hose Kit IFU Document	
Preventative Maintenance	See: Service Agreement and/or User Manual	RotaScope: Page 52 SlidaScope: Page 51 Annual Preventative Maintenance of Cabinets and Shared Air Systems are Recommended – To be done by a Smartline Medical Accredited Service Technician
Selectable storage cabinet cycles	Out of Cabinet Time – 3hrs Non-alcohol Cycle – 12hrs Alcohol Cycle – 168hrs See: Staff Training Manual	See: Wash Validation of Scopes
Transferring Endoscopes	See: User Manual	See: Storing/Hanging A Scope RotaScope: Page 22 SlidaScope: Page 22
IFU for Power Outage	See: User Manual	After a power outage a cabinet will illuminate purple and a label will be printed with associated information. See: Cabinet Reporting Conditions & Power Outages RotaScope: Page 46 & 54 SlidaScope: Page 45 & 53
Model Numbers and Serial Numbers	See: Cabinet	See: Cabinet Model Number – Top Façade Serial Number – Behind front Door at top See: SAB Model Number –Top Façade Serial Number – RHS at Top
Environmental Conditions		Standard office working conditions need to be provided at all times. Room temperature range 10 C° to 30 C°, relative humidity between 40% and 70%, environmental room pressure greater than 102 kPa.
Correcting, resetting and acting on faults	See: User Manual	See: Cabinet Conditions RotaScope: Page 16 SlidaScope: Page 16
Over and under pressure stabilisation band	Instant	Cabinet Air pressure requires no time for stabilisation
SAB Over Temp,	Instant	Alarm: <ul style="list-style-type: none"> • Subtracts time from OoC • Causes SAB to Shutdown Self-rectifying – attempts to run again after 2 minutes.

		Note: Alarm Acknowledge required at Cabinet interface for normal operating function (Yellow Cabinet Lighting) however, OoC will only count down whilst the pump is not running.
Cabinet Temperature, Humidity, Air Pressure, Vacuum and Door Alarms	3 Minutes	Warning Mode: Yellow warning light for first three minutes Alarm: <ul style="list-style-type: none"> Subtracts time from OoC Self-rectifying Alarm, once cabinet reads in normal status, the cabinet will return to green and OoC will cease counting down.
Clean Alarm	24hr Warning (Blue Light)	Alarm: <ul style="list-style-type: none"> Subtracts time from OoC Requires Cabinet Clean Function to rectify alarm
Storage Expiry	Instant	Visible: <ul style="list-style-type: none"> 00:00 On Door Screen "Re-Process Scope" on Label
OoC Expiry	Instant	Visible: <ul style="list-style-type: none"> 00:00 On Door Screen "Re-Process Scope" on Label
Endoscope Channel Condition Prior to Storage	See: Automated Endoscope Reprocessor (AER) IFU or Manual Cleaning Regime	The verification that all channels allow the passage of air before the device is loaded into the storage cabinet is required when a scope has been cleaned and disinfected using a manual cleaning procedure. In the case where the endoscope is cleaned and disinfected using a validated processing procedure (washers compliant with EN ISO 15883-4:2009) this verification is included through channel monitoring however, extensive air flushing of all channels is recommended before placing the endoscope in the cabinet to purge any water left inside endoscope channels from the washers. The absence of purge of internal channels of endoscopes at the end of a washing/disinfection procedure could impact the storage cabinet efficiency. It is reminded to users that it is important to conform to manufacturer's recommendations and instructions. NOTE: In accordance with EN16442
Cabinet Dimensions (Height x Width x Depth)	1810 x 600 x 600mm	
Cabinet Weight Metric	104 kg	

Scope Holding Capacity	8	
Min ceiling height requirement metric	2400mm	
Height (bottom edge) GPO & Data points	2000+mm	
Power USA Power Other regions	110V – Cabinet 240V 50-60Hz	Cabinet Only 2 A @240v Data 12V
Shipping Crate (Height x Width x Depth)	2420 x 770 x 900mm (195kg)	Certified Treated Timber
SHARED AIR BOX		
Shared Air Box Dimensions (Height x Width x Depth)	334 x 600 x 500mm	
Power USA Power Other regions	110V/60Hz 20A Cabinet 240V/50Hz 10A	Actual 3.1A@240V Data: 12V
SAB Product Weight Metric	51 kg	
Room Operating Temperatures Range	>10 to 40°C	
Max Room Humidity - air intake	<70% RH	
Environment	Indoor use only	
Airflow capacity	350 l/m capacity	-200l/m 1x cabinet 120 l/m 2x cabinets 270 mbar vacuum
Thermal protection: Fuse and Measured	80 °C: Thermal Fuse in SAB Housing	76 °C: Electronic Regulated
Shipping Crate (Height x Width x Depth)	750 x 750 x 570mm (95kg)	Certified Treated Timber
Cabinet Materials per AS4187 and EN16442	Glass, Anodised Aluminium, Acrylic, Stainless Steel, Silicone, and PVC labelling	Conforms to AS4187 and EN16442 and is tested SEE: EN16442 test results - Biotech-Germande (France) 2017/2018

Electronic and Compliance Testing
FCC Approved 2018 – Incomplete but in progress 2018 / CE Approval 2018 – Incomplete but in progress 2018
EMC 60601-1 and 60601-2 Complete and independently accredited 2018
EN16442:2015 Complete and accredited to 31 days Storage via international test house Biotech-Germande (France) 2018
Quality Assurance and Manufacture Approvals
ISO-9001 Quality Assurance – 2018 Audited and current & EN-13485 Manufacture Medical Devices 2018 – Incomplete but in progress 2018
TGA-approval article number
ARTG 140018 – Current 2018



SlidaScope™ with Shared Air Box fitted on top

Dimensions: 600mm W x 600mm D x 1810mm mm H Cabinet (2140mm H with Shared Air Box Fitted)

NOTE: Bulkhead also 600 x 330mm

SlidaScope™

OPERATION INSTRUCTIONS

MAN-0910 SlidaScope Cabinet
 RELEASE DATE: 01/2020 Model:
 09.DC-B

22

+61 7 5478 9977
www.SmartlineMedical.com
 P.O. Box 532, Buderim Qld 4556
 55 Cordwell Road, Yandina Q 4561
 +61 7 5478 8854 ABN 34 119 209 611



MAN-0910 SlidaScope Cabinet
RELEASE DATE: 01/2020 Model:
09.DC-B

23

+61 7 5478 9977
www.SmartlineMedical.com
P.O. Box 532, Buderim Qld 4556
55 Cordwell Road, Yandina Q 4561
+61 7 5478 8854 ABN 34 119 209 611

BEFORE STORAGE

NOTE: If you do not air purge the internal channels of the endoscopes after the washing/disinfection procedure, retained moisture could impact on the storage cabinet efficiency. Users are reminded that it is important to conform to manufacturer's recommendations and instructions.

In the case where the endoscope is cleaned and disinfected using a validated processing procedure (washers compliant with EN ISO 15883-4:2009) this verification is included through channel monitoring, however, extensive air flushing of all channels is recommended before placing the endoscope in the cabinet to purge any water left inside endoscope channels from the washers. Scopes should have channels blown dry with medical air from handpiece ports including biopsy channel and thumb ports for *suction* and *air/water*.

Endoscopes should be transferred into storage/ drying cabinet as soon as possible after endoscope has completed all of it set cleaning phases. Take care to not touch any part of the endoscope on surfaces that may cause a cross contamination onto the endoscope.

STORING A SCOPE

1. **WHO** – Operator Tag presented to Cabinet Door Mounted Wand
2. Open the SlidaScope™ Cabinet door
3. Coil the scope loosely and place inside basket, around the air manifold in the centre
4. Attach the vacuum hoses
5. Hoses are connected to the air manifolds via push in & turn clockwise “Luer Lock” fittings. Attach vacuum blockers to all unused luer lock fittings that are not attached via the connectors to the scope channels.
6. **WHAT** – Use Cabinet Door Mounted Wand to swipe Scope Tag
7. **WHERE** – Use Cabinet Door Mounted Wand to swipe desired Storage Location (Position Number)
8. **System will announce** – Scope “Stored”
9. As soon as the Scope(s) have been placed in the baskets (and connected if applicable) close the door & keep the door closed at all times whenever possible.
10. Removal of a Scope is the reverse of the procedure to store them – Steps 1-7
11. **System will announce** – Scope “Removed”

CONNECTING VACUUM TO A SCOPE:

There are usually four channels that need to be connected to vacuum, these are shown below:

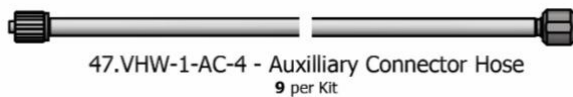
To connect to the SlidaScope™ cabinet the cleaning adaptors that are supplied with the scopes need to be used and differ between the endoscope brands.

NOTE: In accordance with EN16442 it is recommended the scope channels and external surfaces of the scope to be purged and blown off using medical grade air to remove excessive moisture prior to loading into the cabinet for continuous drying. Extra attention must be paid to remove all water droplets from in between control knobs on handpiece.

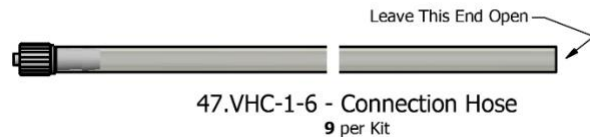
There are usually four channels that need to be connected to vacuum, these are shown below:

To connect to the SlidaScope™ Cabinet the cleaning adaptors that are supplied with the scopes need to be used and differ between the endoscope brands.

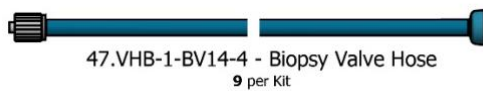
Auxiliary Connector Hose



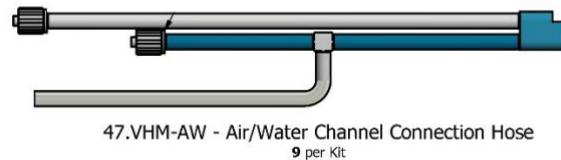
Suction Connection Hose



Biopsy Valve Hose



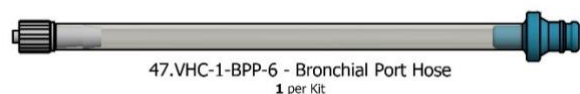
Air Water Connection Hose



Bronchoscope Biopsy Valve Hose

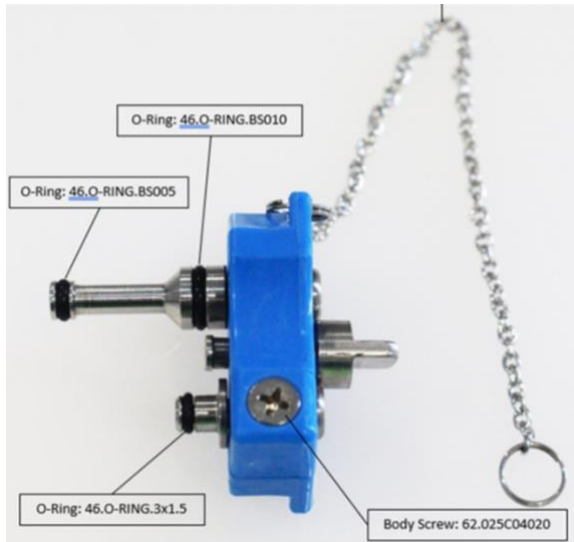


Bronchoscope Port Hose



All other ports must be blocked to ensure a continuous airflow through the channels, these connections are shown below:

Channel Separator 47.VHB-CS



***IMPORTANT: O-rings must be regularly inspected for wear.**



Minimum and maximum temperatures for sterilization of channel separator O-Rings is -40 to 125 C. Washing the O-Rings for prolonged periods over 115 C may cause them to swell, leading to damage to the surface that makes connection and disconnection to endoscopes unworkable. It is recommended O-Rings are replaced at the annual service or prior where visual damage to O-Rings occurs.



Endoscope ports should also be monitored for signs of damage such as sharp edges that could scour the O-Ring surface leading to deterioration and difficulty fitting and removing the channel separators.

SlidaScope™

DATA SYSTEM

MAN-0910 SlidaScope Cabinet
RELEASE DATE: 01/2020 Model:
09.DC-B

27

+61 7 5478 9977
www.SmartlineMedical.com
P.O. Box 532, Buderim Qld 4556
55 Cordwell Road, Yandina Q 4561
+61 7 5478 8854 ABN 34 119 209 611



DATA SYSTEM OVERVIEW

The SlidaScope Data System functions on Linux and RFID Tags, the concept functions on the concept of **WHO**, **WHAT** and **WHERE**, with **WHEN** being automatically captured by the Data System.

1. **WHO** = Operator Tag
2. **WHAT** = Scope Tag

3. WHERE = Device Tag

- **Washer Information**
 - **WHO** - Operator that washed the scope in the AER
 - **WHAT** - Which Scope
 - **WHERE** - Where it was washed (Washer/AER Chamber)
 - Into the AER
 - Out of the AER
- **Storage Information**
 - **WHO** – Operator that stored the scope in the Cabinet
 - **WHAT** - Which Scope
 - **WHERE** - Where is was stored (Cabinet and Location)
 - Into the Cabinet
 - Out of the Cabinet

COUNT DOWN TIMERS

A reduction in reprocessing costs can be obtained through improved efficiencies via the Data Starter Kit to each SlidaScope™ cabinet site. Utilising the oldest stored scope first, will reduce department reprocessing costs.

SLIDASCOPE 1 08:14 27-Jun-18				Scope View 9.34			Time Remaining		
	MIN	MAX							
Temp :	23.0	10.0	40.0	1	--:--		OoC:		
Humid :	59.9	10.0	90.0	2	71:59	JF-140R Olympu	OoC: 02:59		
Air :	0.0	1.0	20.0	3	29:45	White Tube sco	OoC: 02:57		
Vacuum :	-55.0	-13000.0	-5000.0	4	00:00	MH553 Olympus	OoC: 00:00		
SAB Tmp:	20.7	0.0	55.0	5	--:--		OoC:		
Door F :	Open			6	00:00	MAJ-1193	OoC: 00:00		
Door R :	Closed			7	--:--		OoC:		
Clean Due :	Sat 11-Apr 10:00			8	--:--		OoC:		
CONTROL									

SCOPE AND STAFF TAGS

SCOPE TAG – FITS ONTO UMBILICAL CORD

STAFF TAG - USE ON KEY FOB



TAG PROGRAMMER

The Scope Programmer is used to link RFID Tag Information to the Data System. This unit runs off USB and with a PC and software (Scope Manager™). The Scope Manager is used to link storage time and scope names to Scope Tags, it is also used to link operator names to Operator Tags.



BELOW: Scope Manager Software – Used to easily create Scope Tags, Loan Scope Tags or Operator Tags

Scope Manager 1.5

Master Cabinet Address
192.168.10.61

SCOPE USER

RFID 0000000000 RETRIEVE

Type ENDOSCOPE ENDOSCOPE

Description Description of the scope

Out of Cabinet Time 3 Hours

Max Storage Time 12 Hours

UPLOAD

WASHER STATION

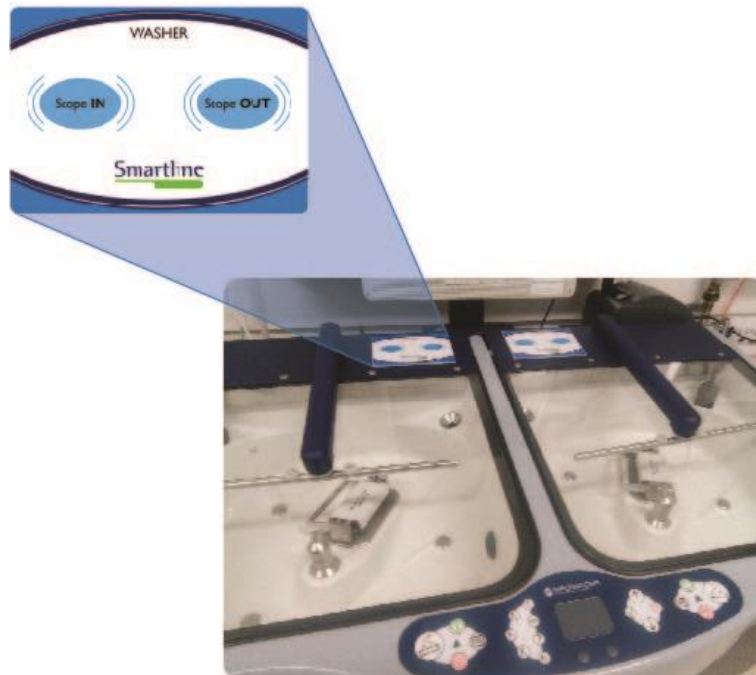


Fig 2 – Washer Area

SEQUENCE FOR WASHING SCOPE: WHO, WHAT, WHERE

WHO



Who – Initiated the wash cycle

WHAT



What – Which scope

WHERE



Where- Which Washer/AER

ADDING AND REMOVING SCOPES FROM THE CABINET

WHO



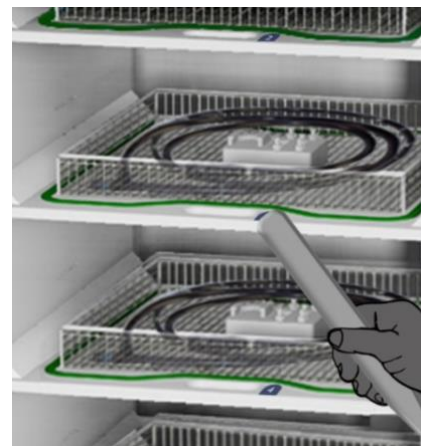
Who - Unlocked the door and is storing/removing the scope

WHAT



What – Which Scope

WHERE



Where – Which cabinet drawer/location

PRINTER STATION

MAN-0910 SlidaScope Cabinet
RELEASE DATE: 01/2020 Model:
09.DC-B

Present Scope Tag to Printer



Printed Label

SCOPE STORAGE RECORD

SCOPE TYPE: ENDOSCOPE
 SCOPE NAME: scope 4
 LOADED TO: ROTASCOPE 1:1
 LOADED TIME: 11:46:58 Jan-06 20
 LOADED BY: Door TAG
 REMOVAL TIME: 11:47:09 Jan-06 20
 REMOVED BY: Richard2
 STORED FOR: 0.0 HOURS
 OOC EXPIRES: 14:46:52 Jan-06 20

REPLACING LABELS

2.3 LOADING LABELS OR TAGS

2.3.1 Loading Roll media

1. With the power supply off, pull the cover open/close latches ① on both sides of the printer toward you to unlock the top cover, and then open the top cover ②.
Note:
 Make sure that the cover rests firmly so that it will not fall forward and injure your hands.



2. While holding the media guide slide lever, adjust the width of the media holder ① to match the media size.



3. Load the media onto the media holder.



4. After pulling out the media, pass the media through the media guides and place the leading edge of the media on top of the platen roller.
Note:
 Make sure the printed side of the media is facing upwards.



Printed side should face upwards

LAPTOP KIT



Laptop Kit Inclusions:

Computer and Processor	1.1 gigahertz (GHz), 64-bit dual-core processor
Operating System	Windows 10
Display	1366 x 768p
Memory (RAM)	4 gigabyte (GB) RAM (64-bit)
Auxiliary parts	Tag reader, Loan Scope tags, Wireless mini USB adaptor

PC OPERATING SYSTEMS

The Tag Programmer or Monitor Software is to be installed on a hospital Laptop or PC (with Wi-Fi). This is an integral part of the system.

SOFTWARE – INSTALLED ONTO LAPTOP

Scope Manager



- Installed onto Laptop
- For setting up RFID tags
- Complete executable installer file

Tag Reader



- Supplied with Laptop Kit
- For reading tags and using with Scope Manager to set up tags

Team Viewer



- Enables remote access to the site Laptop

VNC Viewer



- Access to cabinet screen/control
- Via the shortcut on the laptop



The laptop's desktop background

POSITIONS OF COMPONENTS AND CABLE DISTANCES

Details of the required cable lengths can be identified if the quantities and locations of the components are shown on a set of room layout drawings. By measuring and determining the path the cables run between components, the job can be quoted and ordered easily, and will result in a seamless and easy installation.

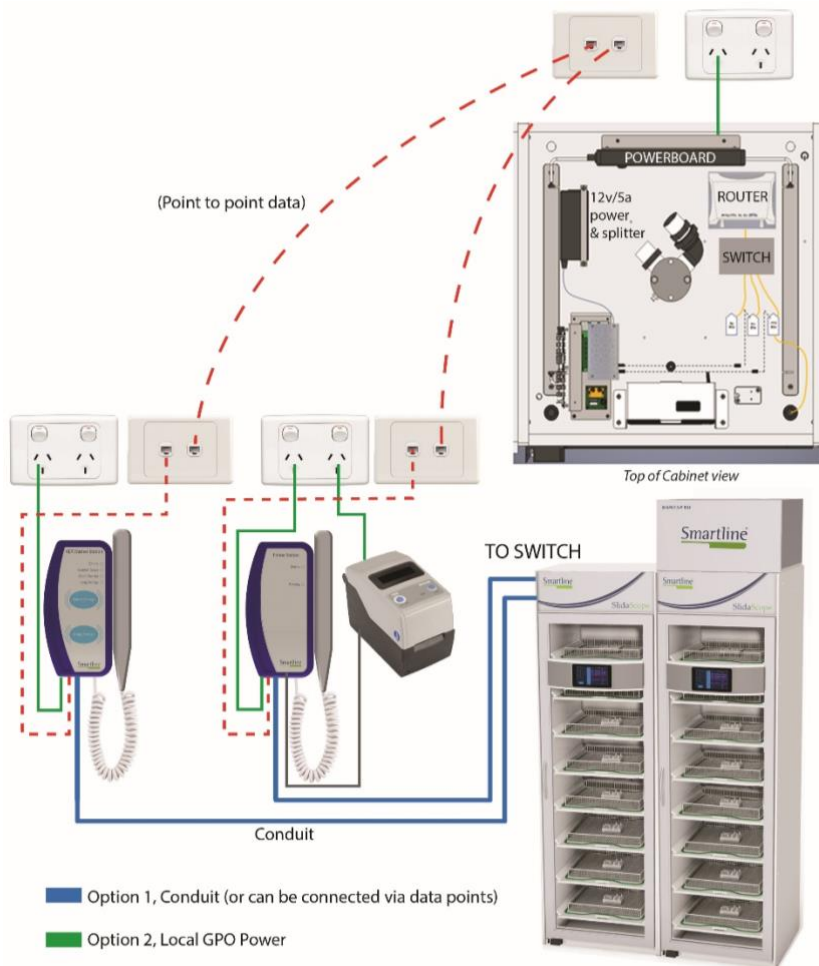
CLOSED NETWORK – TCP/IP

The Data System runs on an independent LAN (Local Area Network), separate from the hospital's own data network. This closed system reduces the additional traffic on the Hospital's IT system and allows the department to completely control the inclusions, as well as arrange and rearrange the components used.

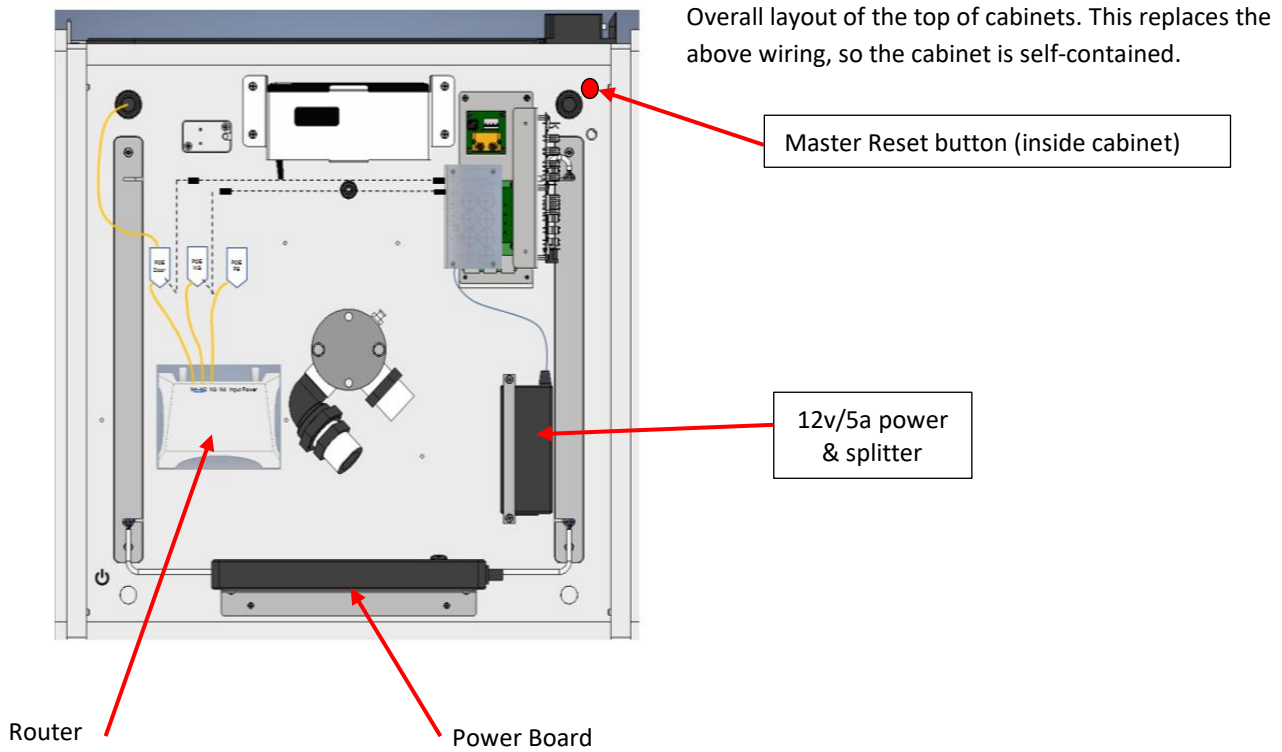
When data needs to be run between rooms, a cable needs to be installed (Cat6 / Ethernet cables and wall sockets).

Details of integrating the system onto the hospital network need to be discussed on a case-by-case basis.

A simplified data and power setup can be seen below:



CABINET RESET BUTTON



PRINTING LABELS

To improve endoscope tracking and traceability, a sticker label printer can instantly display the last use time and processing details. The images below show the three labels that can be generated:

<p>After Storage (2x Labels)</p>	<p>To print this record: Remove scope from cabinet using Who, What, Where sequence, and present Scope Tag to Printer Station Wand</p>	<div data-bbox="1029 459 1343 667" style="border: 1px solid black; border-radius: 15px; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; margin: 0;">SCOPE WASH RECORD</p> <p>SCOPE TYPE: ENDOSCOPE SCOPE NAME: scope 4 WASHER: AER 1 LOADED TIME: 11:46:36 Jan-06 20 LOADED BY: Richard2 REMOVAL TIME: 11:46:42 Jan-06 20 REMOVED BY: Richard2 MAX STORAGE: 168 HOURS OOC EXPIRES: 14:46:52 Jan-06 20</p> </div> <p>(Along with:)</p> <div data-bbox="1029 750 1343 958" style="border: 1px solid black; border-radius: 15px; padding: 5px;"> <p style="text-align: center; margin: 0;">SCOPE STORAGE RECORD</p> <p>SCOPE TYPE: ENDOSCOPE SCOPE NAME: scope 4 LOADED TO: ROTASCOPE 1:1 LOADED TIME: 11:46:58 Jan-06 20 LOADED BY: Door TAG REMOVAL TIME: 11:47:09 Jan-06 20 REMOVED BY: Richard2 STORED FOR: 0.0 HOURS OOC EXPIRES: 14:46:52 Jan-06 20</p> </div>
<p>After Clean</p>	<p>To print this record: Once scope is removed from AER, this label prints</p>	<div data-bbox="1029 996 1343 1205" style="border: 1px solid black; border-radius: 15px; padding: 5px;"> <p style="text-align: center; margin: 0;">CABINET CLEAN RECORD</p> <p>Cabinet: ROTASCOPE 1 Date: 08:07:52 Jan-06 20 User: RICHARD www.smartlinemachinery.com</p> </div>
<p>Incorrect Scope Removal</p>	<p>To print this record: If a scope is removed from cabinet without the correct process being followed, the Incorrect Scope Removal label will print for your records.</p>	<div data-bbox="1029 1254 1343 1462" style="border: 1px solid black; border-radius: 15px; padding: 5px;"> <p style="text-align: center; margin: 0;">INCORRECT SCOPE REMOVAL</p> <p>SCOPE TYPE: ENDOSCOPE SCOPE NAME: scope 4 AER / WASHER: AER 1 WASHED AT: 14:46:58 Dec-16 19 AER OPERATOR: RICHARD STORED IN: REMOVAL TIME: _____ SIGN: _____ www.smartlinemachinery.com</p> </div>

NOTE: These printed labels can add to the efficiencies of the department with a standard and consistent point of reference for the storage and wash details. If Scope status is unconfirmed, a printout can be done to validate the Scope quickly.

SlidaScope™

INSTALLATION REQUIREMENTS



MAN-0910 SlidaScope Cabinet
RELEASE DATE: 01/2020 Model:
09.DC-B

39

+61 7 5478 9977
www.SmartlineMedical.com
P.O. Box 532, Buderim Qld 4556
55 Cordwell Road, Yandina Q 4561
+61 7 5478 8854 ABN 34 119 209 611

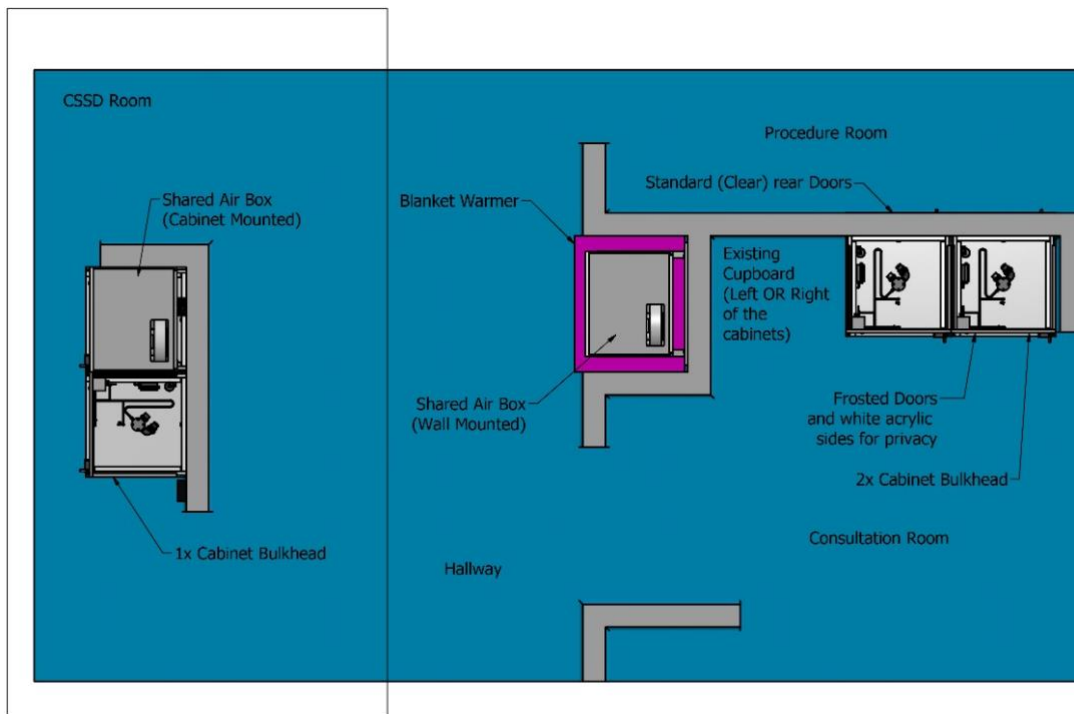
INFORMATION TO GATHER

Prior to your order being processed there is a range of things to consider and clarify with the customer. **Refer to form F227 for required information.**

ROOM LAYOUTS, CEILING HEIGHTS AND WALL CONSTRUCTION

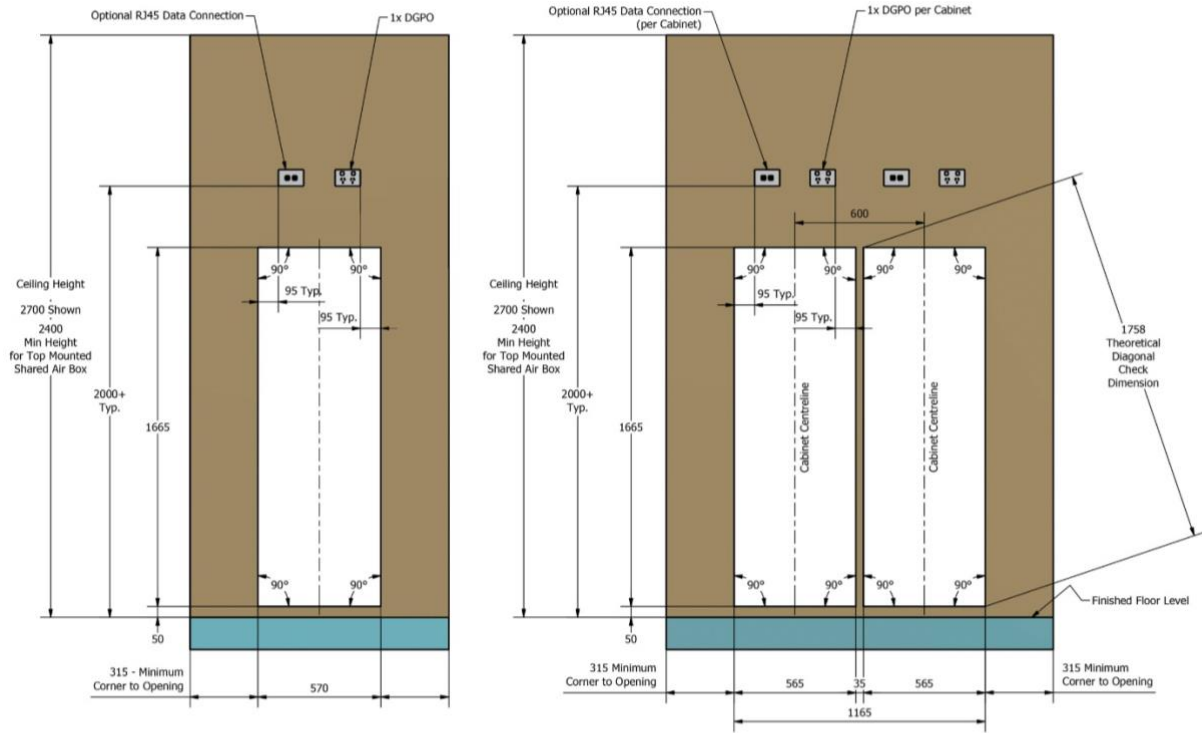
The cabinets and components can be drawn in by obtaining the room layout drawings from the engineering department or creating your own. This drawing will become the most important reference for the job process.

Plan View Example



All doors Hinged on the Right (unless otherwise specified)

Front View Opening and Power & Data Points Example



NOTES;

Drawer Cabinet has 575mm (F to R) x 600mm (L to R) Footprint.
 Floor to Wall Covings behind Cabinet no greater than R15
 No Cornice above Cabinet if Ceiling Height below 2500mm
 Hole Opening Tolerance details below, left.

BULKHEAD

If the ceiling height is 2400-2700mm and there is no SAB mounted on top of the cabinet, a bulkhead should be added to the job. The hospital/builder can arrange to have a bulkhead built onsite to suit but if so, they must have a gas strut hatch at the front for access and servicing.

Cabinet with an Acrylic Bulkhead



MAN-0910 SlidaScope Cabinet
RELEASE DATE: 01/2020 Model:
09.DC-B

42

+61 7 5478 9977
www.SmartlineMedical.com
P.O. Box 532, Buderim Qld 4556
55 Cordwell Road, Yandina Q 4561
+61 7 5478 8854 ABN 34 119 209 611

ACCESS AND ROUTE FOR INSTALL

Prior to each installation, it is very important to confirm access to the location of the cabinets. Mapping the complete route to be sure that a cabinet can be moved through the department / hospital without obstacles / impediments is necessary, to ensure the installation can be completed within the allocated timeframe.

LIFTS / STAIRWELLS

As the SlidaScope™ Cabinet is of significant size, access on site can be of concern on occasion. Lifts being used for access must be at least 2500mm in any one direction, and if not, it will have to be confirmed that the stairwell is an acceptable alternative route.

INSTALL DATES, WORK HOURS

On occasion, capital equipment installation and work with pass-through SlidaScope™ Cabinets must be completed during particular hours e.g. between lists or when department is not in use. Early establishment of the customer needs in this regard will assist Smartline Machinery with planning and logistics and should be discussed at the point of sale.

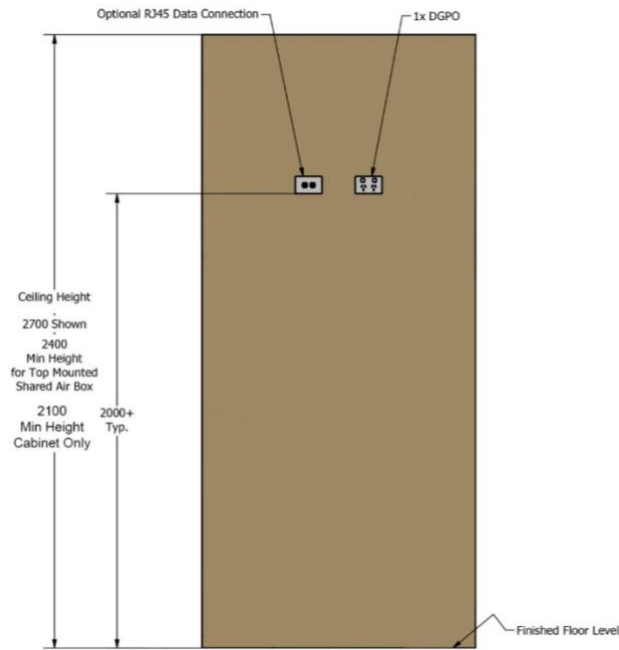
****All the above points are outlined, and data is collected within the F227 form.**

POWER NEEDS

One double GPO must be installed per cabinet in the position shown below:

NOTE: For details on pass-through wall opening where more than one cabinet is to be installed, refer to wall opening drawings.

Power and Data Point Positions



SlidaScope™

STAFF TRAINING AND EDUCATION

MAN-0910 SlidaScope Cabinet
 RELEASE DATE: 01/2020 Model:
 09.DC-B



STANDARD WORKFLOW

The following flow chart includes the SlidaScope™ wash-use workflow. This diagram may cover some steps that are not required for every installation.



The typical endoscope workflow is as follows:

1. End of procedure (bedside wipe down)
2. Manual wash and leak test
3. Scan Scope into AER washer
4. AER wash (automated endoscope re-processor)
5. Scan scope out of AER washer
6. Print receipt (scope processing record)
7. Storage in SlidaScope™ Cabinet (in & out)
8. Print receipt (scope processing and storage record)
9. Start of procedure (bedside)

CABINET REPORTING CONDITIONS

The SlidaScope™ Environmental Monitor measures and records the following cabinet conditions:

MAN-0910 SlidaScope Cabinet
 RELEASE DATE: 01/2020 Model:
 09.DC-B

46

+61 7 5478 9977
www.SmartlineMedical.com
 P.O. Box 532, Buderim Qld 4556
 55 Cordwell Road, Yandina Q 4561
 +61 7 5478 8854 ABN 34 119 209 611

- Temperature
- Vacuum
- Humidity
- Pressure
- Routine Cleaning Status
- Power outages

The system automatically maintains a positive pressure within each cabinet. By having a positively pressured cabinet, external air (cleaning room / theatre) will not flow into the cabinet.

All the Environmental Conditions are measure and recorded by the Data Management System as required to meet the EN16442 standards. Upon a reading level in the Warning or Alarm values of these conditions the following will occur:

- An automatically generated printout identifies the issue
- Cabinet alarm will sound
- Cabinet lighting will change colour (each fault has an assigned colour)

CABINET LIGHT COLOUR KEY



Red = Alarm

**White = Door
Open**

**Magenta =
Power Outage**

**Blue = Clean
Due**

**Green = Neutral /
Normal
Operation**

**Yellow =
Warning**

IN-SERVICE TRAINING FOR SITE

At the commencement of an installation, the department manager and key staff will require 'In-service' training.

The time and date of this training needs to be discussed prior to installation, however, cannot be done before the site is functioning- i.e. power, data and endoscopes available.

If the cabinets are being installed on a construction site and/or for contractors, in-service training may need to be carried out in two stages:

Stage 1 – Before handover and to the nominated parties of the contractors

Stage 2 – After site handover and to the operators / department staff

If this is the case, Hospital / Department may be required to be quoted separately. This is due to the fact that all purchases of the contractors will need to be signed off prior to handover and usually happens before completion of the build.

ADDITIONAL TRAINING AND SETUP

A representative will guide the implementation of the Data System at a high level i.e. set up:

- Hose Kits - How to connect a scope
- Operator Tags - How to program RFID Operator Tags
- Scope Tags - How to program RFID Scope Tags

SlidaScope™

MAINTENANCE AND CLEANING



Follow these cleaning processes to ensure a decontaminated environment before using the cabinet for storing any endoscopes.

AIR LINES

Hose kits and ESC connectors are to be disinfected every 7 days or upon disconnection from a valid stored endoscope if time since last disinfection exceeds 7 days. Hoses and ESC connectors should be inspected for any damage or degradation of the items that would diminish the items ability to perform at its full capacity.

Before attaching the airline to the scopes or the cabinet we recommend sterilizing the hoses and lines in an autoclave washer.

HOOK-UPS (CLEANING ADAPTORS)

Pre cleaning is required - These scope hook-ups (if required) should be washed according to manufacturer's recommendations before use, this may be achieved in the endoscope washer or autoclave.

BASKETS

Pre-cleaning of baskets is required. Before using inside the cabinet we recommend washing and/or sterilizing the baskets. Baskets should be disinfected every 7 days minimum (along with the hose attachments).

CLEANING

Cabinet interior & exterior surfaces to be cleaned using soft, clean cloths & non-abrasive cleaning/disinfecting products that do not contain ammonia or alcohol. Any abrasive cleaning product or cloth/scourers will permanently mark the surface & potentially allow bacteria to grow within the fine surface scratches.

Do not allow electrical or electronic components, where fitted, to become wet or splashed with water or other fluids. Any fluids issuing from recently attached scopes should immediately be wiped up.

INTERNAL SURFACES

Cleaning of the SlidaScope™ cabinet should be carried out regularly in accordance with hospital procedures.

Clean from top to bottom, and hardest to reach section to easiest to reach section of the cabinet. The recommended cleaning technique is to wipe all interior surfaces with a non-alcoholic disinfectant wipe. (Please avoid cleaners containing ammonia or alcohol, as it will cause damage to the cabinet surfaces).

Any fluids inadvertently spilled or dripped onto the drawers or cabinet floor are to be wiped up immediately.

EXTERIOR SURFACES

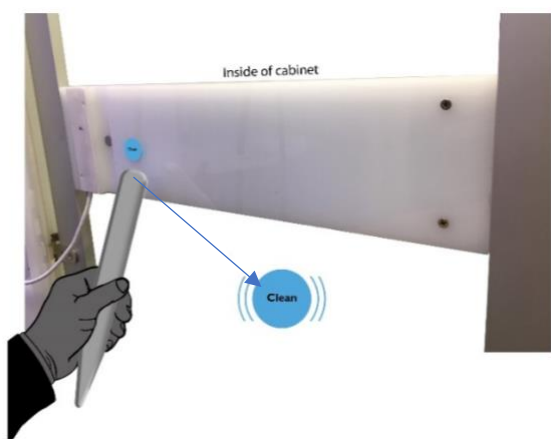
Depending on the type of external environment in which the cabinet is located, you could follow the directions for cleaning interior surfaces or simply wipe all surfaces down with a mild detergent and soft cloth. Please avoid cleaners containing ammonia or alcohol, as it will cause damage to the cabinet surfaces.

CLEANING DATA VALIDATION

The Clean Due time is a **reminder** of the scheduled cleaning day. The internal cabinet light will turn Blue at 7am of the day of cleaning (as a reminder). The cabinet should be cleaned within 24 hours of the Blue light reminder. *It is also acceptable to clean *before* the scheduled day.

Slida 1 14:40 12/06/18		Scope View 9.34		Time Remaining	
	MIN MAX	1	--:--	OoC:	
Temp :	21.5 10 40	2	70:44	JF-140R Olympu	OoC: 02:59
Humid :	59.3 10 90	3	00:00	White Tube sco	OoC: 00:00
Air :	0.0 1 20	4	00:00	MH553 Olympus	OoC: 00:00
Vacuum :	-46.5 -13000 -5000	5	--:--	OoC:	
SAB Tmp:	20.7 0 55	6	00:00	MAJ-1193	OoC: 00:00
Door F :	Open	7	--:--	OoC:	
Door R :	Closed	8	--:--	OoC:	
Clean Due: Sat 11-Apr 10:00					
CONTROL					

Once cabinet is cleaned, operator should validate the clean by scanning USER tag, then CLEAN spot inside the cabinet. Cabinet will announce "Cleaned". A Cabinet Cleaning Record will automatically be printed and the cabinet light will return to neutral. If this clean process is not performed within 24 hours of the Clean reminder, the cabinet will turn RED and assumed 'contaminated'.



Printer on included bracket



SAFETY

SAFE OPERATING PROCEDURE

- SlidaScope™ Cabinets MUST BE positioned on a stable, level floor.
- Cabinet power cable must be securely plugged into a standard GPO & switched 'On'. Note that not all variants require power for each unit.
- Inspect door components of the equipment prior to use as well as daily – inspection to also be performed on rear door where fitted.
 - Inspect the door components i.e.: handle, hinges, and locking mechanism (where fitted) for functionality, “wear and tear” or damage.
 - Is the door easy to open and shut?
 - Are there any obstructions in front of, or near the door to prevent it from opening?
 - Do the cabinet interior lamps illuminate when the door is opened & extinguish when the door is closed?
 - Inspect that each occupied drawer basket has no more than one scope attached.
- Inspect the silicone connection hoses & luer fittings for “wear & tear” or damage
- Are the silicone connection hoses connected to the manifold luer fittings?
- Are the silicone connection hoses connected to the cleaning adaptors or scopes as per instruction diagrams?
- Are the instruction diagrams located within convenient view?
- Is the power cable securely plugged in & power turned 'On'?
- Inspect all data system components power cables are securely plugged in & power switched 'On'.
- Inspect all data system components, accessories & connection cables for functionality, 'wear & tear' or damage.
- If any inspection fails, please advise your supervisor as soon as possible.

PRE-START CHECKS

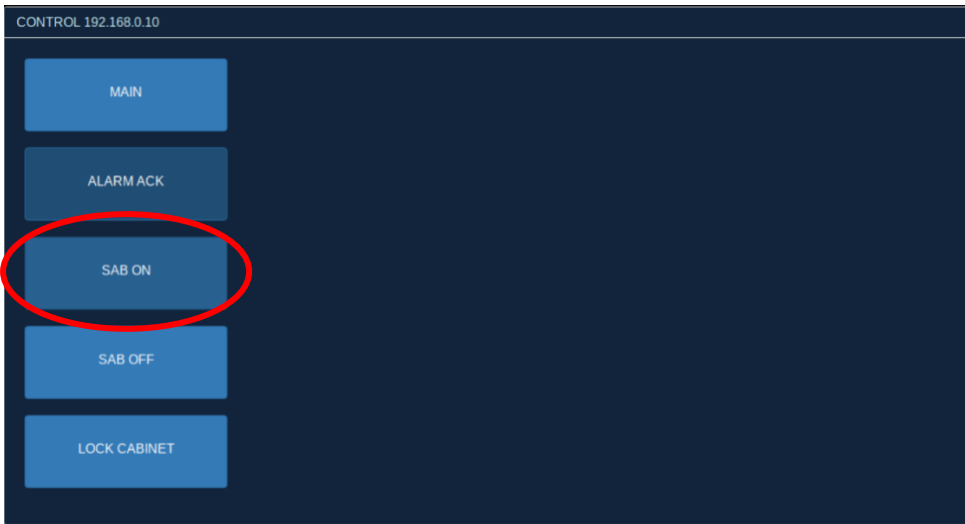
- Ensure that the cabinet is connected to a certified GPO.

If Shared Air Box (SAB) is mounted on or near the cabinet in question, please check the following:

- Ensure that the SAB external wiring loom is plugged into the cabinet controller and the SAB.
- Ensure that the air and vacuum hoses are connected.
- Refer to installation drawings to ensure correct installation of the SAB.

TURNING ON THE CABINET

- The SAB is controlled by the cabinet-mounted touch screen on the front of the SlidaScope™ cabinet.
- Press the SAB ON / SAB OFF on the Control Screen to start the SAB.
- Once the SAB is running the display will update with cabinet temperature, humidity, air, vacuum

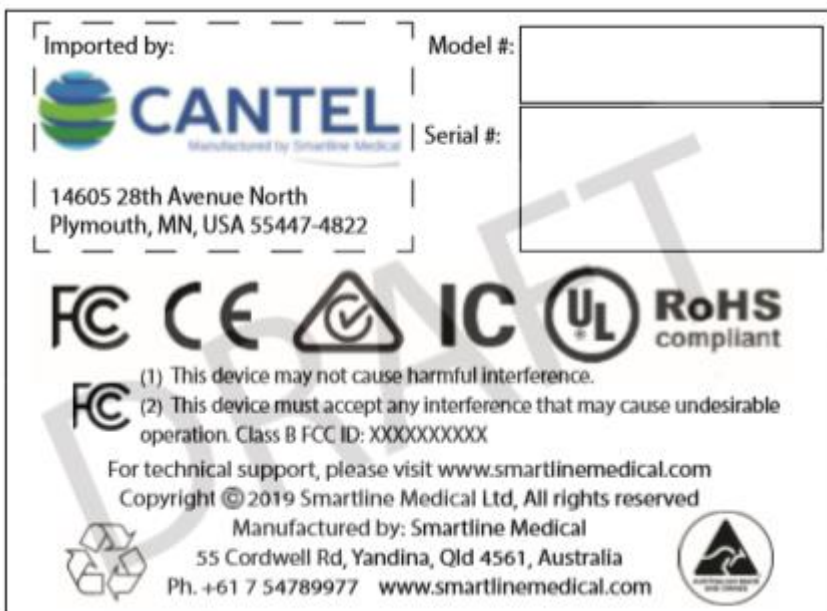


MAINTENANCE CONTRACTS

To ensure you get the best performance out of your SlidaScope™ Cabinets, it is an operational requirement to have a Maintenance Contract in place. These contracts are to be set up through the Maintenance Department. A Maintenance Contract is an annual service agreement covering replacement equipment e.g. filters and parts for the Shared Air Box and basic ongoing cabinet maintenance.

COMPLIANCE

A sample compliance sticker has been shown below. Please refer to your individual product for the compliance label that relates to your region.



SlidaScope™

TROUBLESHOOTING



MAN-0910 SlidaScope Cabinet
RELEASE DATE: 01/2020 Model:
09.DC-B

54

+61 7 5478 9977
www.SmartlineMedical.com
P.O. Box 532, Buderim Qld 4556
55 Cordwell Road, Yandina Q 4561
+61 7 5478 8854 ABN 34 119 209 611

PHYSICAL TESTS AND CHECKS

AIR FLOW CHECK

User to connect OXYVIEW in-line between scope channel and vacuum manifold to check air circulation through different channels.

Using OxyView flow meter the minimum flow rate detectable is 1 l/min.

ENDOSCOPE CONDITION CHECK

The verification that all channels allow the passage of air before the device is loaded into the storage cabinet is required when a scope has been cleaned and disinfected using a manual cleaning procedure. The internal channels of the endoscope are to undergo an aeration test (bubble test) as per manufactures instructions.

In the case where the endoscope is cleaned and disinfected using a validated processing procedure (washers compliant with EN ISO 15883-4:2009) this verification is included through channel monitoring however, extensive air flushing of all channels is recommended before placing the endoscope in the cabinet to purge any water left inside endoscope channels from the washers.

POWER OUTAGES

Restore power as quickly as possible to endoscope storage cabinet or transfer endoscope to a fully operational cabinet. Endoscope count down timer will count every minute that the endoscope is stored without power as a minute of Out of Cabinet time. Each endoscope has only 180 minutes of Out of Cabinet time per cleaning cycle. If endoscopes are stored without power for a time period that excess the Out of Cabinet time, endoscopes will have to go through the cleaning cycle again in full to be reprocessed in order to be used.

SlidaScope™

ANNEX A – VALIDATED SCOPES FOR STORAGE

VALIDATED SCOPES OVERVIEW

Currently there are some endoscopes that can be stored in the cabinet that have a flow rate that is below the detectable flow rate of 1 l/min.

AUX, air & water channels have less than the minimum detectable flow rate of the Oxyview. The cabinets do not monitor individual channel flow rates, only vacuum air pressure is monitored in the manifold of the cabinets. Air flow device should be used to verify that air is flowing through the channels of the endoscope under test conditions only, not for normal operation use.

OLYMPUS COLONOSCOPES

Name	Brand	Series	Type
*+CF-H260AZI158	Olympus		Colonoscope
*+CF-H260AZL158	Olympus		Colonoscope
*CF-240AI49	Olympus		Colonoscope
*CF-240AL49	Olympus		Colonoscope
*CF-H180DI293	Olympus		Colonoscope
*CF-H180DL293	Olympus		Colonoscope
*CF-H260AI158	Olympus		Colonoscope
*CF-H260AL158	Olympus		Colonoscope
*CF-H260DI293	Olympus		Colonoscope
*CF-H260DL293	Olympus		Colonoscope
*CF-H290I297	Olympus		Colonoscope
*CF-H290L297	Olympus		Colonoscope
*CF-HQ290I297	Olympus		Colonoscope
*CF-HQ290L297	Olympus		Colonoscope
*CF-Q240AI49	Olympus		Colonoscope
*CF-Q240AL49	Olympus		Colonoscope
*CF-Q260AI158	Olympus		Colonoscope
*CF-Q260AL158	Olympus		Colonoscope
*PCF-160AI36	Olympus		Colonoscope
*PCF-160AL36	Olympus		Colonoscope

*PCF-H290I297	Olympus	Colonoscope
*PCF-H290L297	Olympus	Colonoscope
*PCF-P240AI49	Olympus	Colonoscope
*PCF-P240AL49	Olympus	Colonoscope
*PCF-Q260AI158	Olympus	Colonoscope
*PCF-Q260AL158	Olympus	Colonoscope
*PCF-Q260AZI293	Olympus	Colonoscope
+CF-Q160ZI37	Olympus	Colonoscope
+CF-Q160ZL37	Olympus	Colonoscope
CF-100I11, 98	Olympus	Colonoscope
CF-100L11, 98	Olympus	Colonoscope
CF-100S98, 50	Olympus	Colonoscope
CF-100TI14	Olympus	Colonoscope
CF-100TL14	Olympus	Colonoscope
CF-130I129	Olympus	Colonoscope
CF-130L129	Olympus	Colonoscope
CF-130S127, 129	Olympus	Colonoscope
CF-140I	Olympus	Colonoscope
CF-140L38, 105	Olympus	Colonoscope
CF-140S38	Olympus	Colonoscope
CF-160ZI	Olympus	Colonoscope
CF-160ZL	Olympus	Colonoscope
CF-200HL	Olympus	Colonoscope
CF-200S49	Olympus	Colonoscope
CF-240DI156	Olympus	Colonoscope
CF-240DL156	Olympus	Colonoscope
CF-240I49	Olympus	Colonoscope
CF-240L49	Olympus	Colonoscope
CF-2T160I	Olympus	Colonoscope
CF-2T160L	Olympus	Colonoscope
CF-40I	Olympus	Colonoscope
CF-40L22, 34, 105	Olympus	Colonoscope
CF-FH260AZI	Olympus	Colonoscope
CF-FH260AZL	Olympus	Colonoscope
CF-H180AI	Olympus	Colonoscope
CF-H180AL	Olympus	Colonoscope
CF-H185I	Olympus	Colonoscope
CF-H185L	Olympus	Colonoscope
CF-H190I	Olympus	Colonoscope
CF-H190L2	Olympus	Colonoscope

CF-HQ190I	Olympus	Colonoscope
CF-HQ190L	Olympus	Colonoscope
CF-Q140I	Olympus	Colonoscope
CF-Q140L20, 38	Olympus	Colonoscope
CF-Q145I	Olympus	Colonoscope
CF-Q145L	Olympus	Colonoscope
CF-Q150I290	Olympus	Colonoscope
CF-Q150L290	Olympus	Colonoscope
CF-Q160AI	Olympus	Colonoscope
CF-Q160AL	Olympus	Colonoscope
CF-Q160DI	Olympus	Colonoscope
CF-Q160DL	Olympus	Colonoscope
CF-Q160I	Olympus	Colonoscope
CF-Q160L	Olympus	Colonoscope
CF-Q160S	Olympus	Colonoscope
CF-Q165I	Olympus	Colonoscope
CF-Q165L	Olympus	Colonoscope
CF-Q180AI	Olympus	Colonoscope
CF-Q180AL	Olympus	Colonoscope
CF-Q240I49	Olympus	Colonoscope
CF-Q240L49	Olympus	Colonoscope
CF-Q240ZI49	Olympus	Colonoscope
CF-Q240ZL49	Olympus	Colonoscope
CF-Q260AL	Olympus	Colonoscope
CF-Q260DI158	Olympus	Colonoscope
CF-Q260DL158	Olympus	Colonoscope
CF-V70I183, 184	Olympus	Colonoscope
CF-V70L183, 184	Olympus	Colonoscope
CF-VI	Olympus	Colonoscope
CF-VL	Olympus	Colonoscope
PCF-100127	Olympus	Colonoscope
PCF-130I84	Olympus	Colonoscope
PCF-130L84, 129	Olympus	Colonoscope
PCF-140I38, 105	Olympus	Colonoscope
PCF-140L38	Olympus	Colonoscope
PCF-240I49	Olympus	Colonoscope
PCF-240L49	Olympus	Colonoscope
PCF-240S49	Olympus	Colonoscope
PCF-H180AI	Olympus	Colonoscope
PCF-H180AL	Olympus	Colonoscope

PCF-H190DI	Olympus	Colonoscope
PCF-H190DL	Olympus	Colonoscope
PCF-H190I	Olympus	Colonoscope
PCF-H190L	Olympus	Colonoscope
PCF-PH190I	Olympus	Colonoscope
PCF-PH190L	Olympus	Colonoscope
PCF-PQ260I293	Olympus	Colonoscope
PCF-PQ260L293	Olympus	Colonoscope
PCF-Q160AI	Olympus	Colonoscope
PCF-Q160AL	Olympus	Colonoscope
PCF-Q180AI205	Olympus	Colonoscope
PCF-Q180AL	Olympus	Colonoscope
PCF-Q260JI293	Olympus	Colonoscope
PCF-Q260JL293	Olympus	Colonoscope

OLYMPUS GASTROSCOPES

Name	Brand	Series	Type
GF-UE140P	Olympus		Gastro
GF-UE160	Olympus		Gastro
GF-UM240	Olympus		Gastro
GF-UE160-AL5	Olympus		Gastro
GF-UMQ240	Olympus		Gastro
GF-UM2000	Olympus		Gastro
GIF-100	Olympus		Gastro
GIF-130	Olympus		Gastro
GIF-14038, 105	Olympus		Gastro
GIF-145	Olympus		Gastro
GIF-160	Olympus		Gastro
GIF-1T10098	Olympus		Gastro
GIF-1T130128	Olympus		Gastro
GIF-1T140	Olympus		Gastro
GIF-1T160	Olympus		Gastro
GIF-1T2098, 122	Olympus		Gastro
GIF-1T3035	Olympus		Gastro
GIF-1TH190	Olympus		Gastro
GIF-1TQ160	Olympus		Gastro
GIF-2T100	Olympus		Gastro
GIF-2T160	Olympus		Gastro
GIF-2T200243	Olympus		Gastro

GIF-2T2035, 98, 122	Olympus	Gastro
GIF-2TH180	Olympus	Gastro
GIF-E	Olympus	Gastro
GIF-E3	Olympus	Gastro
GIF-FQ260	Olympus	Gastro
GIF-FQ260Z	Olympus	Gastro
GIF-H180	Olympus	Gastro
GIF-H180J	Olympus	Gastro
GIF-H185	Olympus	Gastro
GIF-H190	Olympus	Gastro
GIF-H260158	Olympus	Gastro
GIF-H260Z293	Olympus	Gastro
GIF-H290297	Olympus	Gastro
GIF-HQ190	Olympus	Gastro
GIF-HQ290297	Olympus	Gastro
GIF-PQ20	Olympus	Gastro
GIF-Q10	Olympus	Gastro
GIF-Q140	Olympus	Gastro
GIF-Q145	Olympus	Gastro
GIF-Q150290	Olympus	Gastro
GIF-Q160	Olympus	Gastro
GIF-Q160Z	Olympus	Gastro
GIF-Q165	Olympus	Gastro
GIF-Q180	Olympus	Gastro
GIF-Q200155	Olympus	Gastro
GIF-Q2031, 98	Olympus	Gastro
GIF-Q260158	Olympus	Gastro
GIF-Q260J293	Olympus	Gastro
GIF-Q30122	Olympus	Gastro
GIF-Q4034	Olympus	Gastro
GIF-V2125	Olympus	Gastro
GIF-V43	Olympus	Gastro
GIF-V70183, 184	Olympus	Gastro
GIF-XQ10	Olympus	Gastro
GIF-XQ140	Olympus	Gastro
GIF-XQ20	Olympus	Gastro
GIF-XQ260158	Olympus	Gastro
GIF-XQ30	Olympus	Gastro
GIF-XQ4034	Olympus	Gastro
GIF-XT30	Olympus	Gastro

OLYMPUS DUODENOSCOPES

Name	Brand	Series	Type
PJF-16	Olympus		Duodeno
PJF-160	Olympus		Duodeno
PJF-240	Olympus		Duodeno
TJF-140	Olympus		Duodeno
TJF-140F	Olympus		Duodeno
TJF-140R	Olympus		Duodeno
TJF-145	Olympus		Duodeno
TJF-160F	Olympus		Duodeno
TJF-160R	Olympus		Duodeno
TJF-160VF	Olympus		Duodeno
TJF-160VR	Olympus		Duodeno
TJF-240	Olympus		Duodeno
TJF-260V	Olympus		Duodeno
JF-140	Olympus		Duodeno
JF-140F	Olympus		Duodeno
JF-1T40	Olympus		Duodeno
JF-240	Olympus		Duodeno
TJF-Q180V	Olympus		Duodeno
TJF-Q180V	Olympus		Duodeno

OLYMPUS BRONCHOSCOPES

Name	Brand	Series	Type
BF-30	Olympus		Bronco
BF-40	Olympus		Bronco
BF-140	Olympus		Bronco
BF-160	Olympus		Bronco
BF-180	Olympus		Bronco
BF-200	Olympus		Bronco
BF-240	Olympus		Bronco
BF-240AWY1	Olympus		Bronco
BF-260	Olympus		Bronco
BF-6C240	Olympus		Bronco
BF-6C260	Olympus		Bronco
BF-MP160	Olympus		Bronco
BF-MP160F	Olympus		Bronco
BF-MP60	Olympus		Bronco

MAN-0910 SlidaScope Cabinet
 RELEASE DATE: 01/2020 Model:
 09.DC-B

BF-P30	Olympus	Bronco
BF-P40	Olympus	Bronco
BF-P60	Olympus	Bronco
BF-P150	Olympus	Bronco
BF-P160	Olympus	Bronco
BF-P180	Olympus	Bronco
BF-P190	Olympus	Bronco
BF-P200	Olympus	Bronco
BF-P240	Olympus	Bronco
BF-P290	Olympus	Bronco
BF-Q180-AC	Olympus	Bronco
BF-Q190	Olympus	Bronco
BF-TE2	Olympus	Bronco
BF-XP160	Olympus	Bronco
BF-1T30	Olympus	Bronco
BF-1T30D	Olympus	Bronco
BF-1T40	Olympus	Bronco
BF-1T180	Olympus	Bronco
BF-1TQ180	Olympus	Bronco
BF-1T200	Olympus	Bronco
BF-1T240	Olympus	Bronco
BF-1T260	Olympus	Bronco
BF-Q180	Olympus	Bronco
BF-XT30	Olympus	Bronco
BF-F260	Olympus	Bronco
BF-H190	Olympus	Bronco
BF-XP190	Olympus	Bronco
BF-1TH190	Olympus	Bronco
BF-P260F	Olympus	Bronco
ENF-VT	Olympus	Bronco
ENF-VT2	Olympus	Bronco
LTF-160	Olympus	Bronco
LTF-240	Olympus	Bronco
MAF-TM	Olympus	Bronco

PENTAX SCOPES

Name	Brand	Series	Type
EC-3801F ^{76, 115}	Pentax	3800	Colonoscope
EC-3801F2 ^{76, 115}	Pentax	3800	Colonoscope

MAN-0910 SlidaScope Cabinet
 RELEASE DATE: 01/2020 Model:
 09.DC-B

EC-3801M ^{76, 115}	Pentax	3800	Colonoscope
EC-3801M2 ^{76, 115}	Pentax	3800	Colonoscope
EC-3801S2 ^{76, 115}	Pentax	3800	Colonoscope
FC-38FW ¹¹¹	Pentax	W	Colonoscope
FC-38FW2 ^{111, 140}	Pentax	W	Colonoscope
FC-38MW ¹¹¹	Pentax	W	Colonoscope
FC-38MW2 ²⁸⁸	Pentax	W	Colonoscope
FC-38SW2 ¹⁴⁰	Pentax	W	Colonoscope
FC-38FV ^{60, 66, 111}	Pentax	V	Colonoscope
EC-3830F ^{64, 67, 72}	Pentax	30	Colonoscope
EC-3830F2 ^{64, 67}	Pentax		Colonoscope
EC-3830M ^{64, 67, 72}	Pentax		Colonoscope
EC-3830M2 ^{64, 67, 72}	Pentax		Colonoscope
EC-3831F ¹⁴⁵	Pentax		Colonoscope
EC-3830FK	Pentax	30K	Colonoscope
EC-3831FK ¹²⁷	Pentax	30K	Colonoscope
EC-3840F	Pentax	40	Colonoscope
EC-3840FK	Pentax	40K	Colonoscope
EC-3840TFK	Pentax	40K	Colonoscope
EC-3470FK ¹⁶⁹	Pentax	70K	Colonoscope
EC-3470MK ¹⁶⁹	Pentax	70K	Colonoscope
EC-3870FK	Pentax	70K	Colonoscope
EC-3870MK ¹⁶⁹	Pentax	70K	Colonoscope
EC-3870FZK	Pentax	70K	Colonoscope
EC-3880FK	Pentax	80K	Colonoscope
EC-3880FK2	Pentax	80K	Colonoscope
EC-3880MK ¹⁶⁹	Pentax	80K	Colonoscope
EC-3880MK2	Pentax	80K	Colonoscope
EC-3885F ¹⁶⁹	Pentax	85	Colonoscope
EC-3885F2 ¹⁶⁹	Pentax	85	Colonoscope
EC-3885M2 ¹⁶⁹	Pentax	85	Colonoscope
EC-3885S2 ¹⁶⁹	Pentax	85	Colonoscope
EC-3885FK	Pentax	85K	Colonoscope
EC-3885FK2	Pentax	85K	Colonoscope
EC-3885MK ¹⁶⁹	Pentax	85K	Colonoscope
EC-3885MK2 ¹⁶⁹	Pentax	85K	Colonoscope
EC-3885SK2 ¹⁶⁹	Pentax	85K	Colonoscope
EC-3885TFK	Pentax	85K	Colonoscope

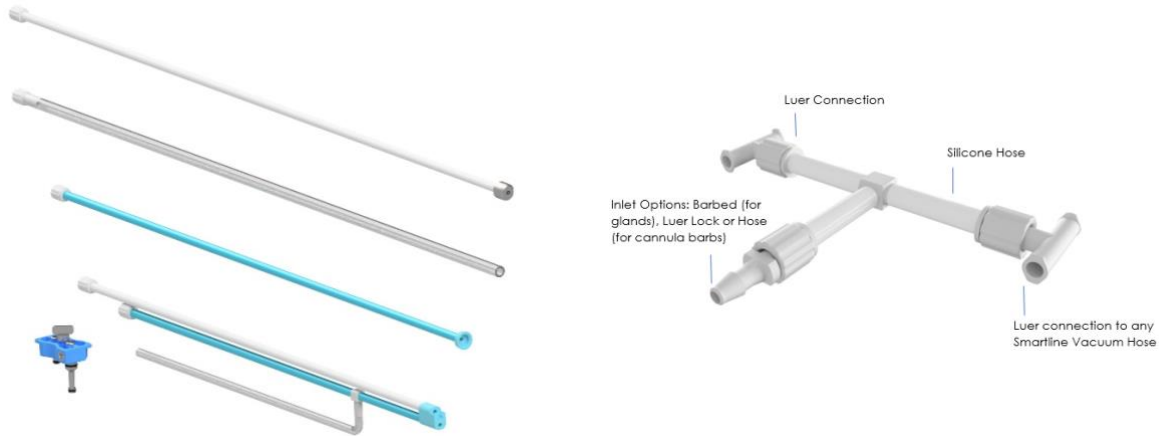
MAN-0910 SlidaScope Cabinet
 RELEASE DATE: 01/2020 Model:
 09.DC-B

EC-3885TMK ¹⁶⁹	Pentax	85K	Colonoscope
EC-201WM	Pentax	201	Colonoscope

FUJINON SCOPES

Name	Brand	Series	Type
EC-450ZW5/M	Fujinon	450	Colonoscope
EC-490ZW5/M ^{262, 264}	Fujinon	490	Colonoscope
EC-250WM5	Fujinon	250	Colonoscope
EC-450WM5	Fujinon	450	Colonoscope
EC-530FM	Fujinon	530	Colonoscope
EC-530MT ²⁹³	Fujinon	530	Colonoscope
EC-530WM	Fujinon	530	Colonoscope
EC-530WTM ²⁶³	Fujinon	530	Colonoscope
EC-590WM	Fujinon	590	Colonoscope
EC-590ZW/M	Fujinon	590	Colonoscope
EC-250DM5	Fujinon	250	Colonoscope
EC-450DM5	Fujinon	450	Colonoscope
EC-530DM	Fujinon	530	Colonoscope
EC-450WM	Fujinon	450	Colonoscope
EC-530WM3	Fujinon		Colonoscope
EC-530MWM3	Fujinon		Colonoscope
EC-590WM4	Fujinon	590	Colonoscope
EC-590ZW3M	Fujinon	590	Colonoscope

ANNEX B - INSTRUCTIONS FOR USE – ENDOSCOPE HOSE KIT CLEANING



Olympus Endoscope Vacuum Hose Kit (09.HK-OL) Washer rack Hose Connection Kit (09.SC-WRHKC)

Note: applicable to other scope brand variants also – Endoscope Vacuum Hose Kits join Endoscopes to the RotaScope or SlidaScope Drying Cabinet airflow system

High-level disinfection of each hose connector should be undertaken weekly (during the cabinet cleaning cycle).

Cleaning may be Manual or Automated and can also be autoclaved to gain shelf life.

Below is the minimum requirement to ensure hoses are in a satisfactory condition to provide a clean connection between the endoscope and the cabinet.

During Weekly Cleaning, please reference the following instructions and modify where required, to suit the equipment available to the department.

Smartline have created a modular accessory called a “Washer Rack Vacuum Hose Connection Kit”, that can be utilised during the cleaning process.

MANUAL CLEANING

RECOMMENDED STEPS:

1. Prepare appropriate amount of cleaning solution (biofilm remover or enzymatic detergent solution) in a sink, as per the manufacturer's instructions.
2. Remove hose/s to be cleaned from cabinet and place in sink.
3. Make sure the hoses remain fully immersed throughout the cleaning process.
4. Use a small soft brush to clean the connectors at each end of the hose.
5. Wipe exterior surfaces of hoses with a nonabrasive and lint free cloth.
6. Check that all visible debris have been removed.
7. Attach hoses to a **Washer Rack Hose Connection Kit**.
8. Use a syringe to push fresh solution through hoses and then flush out. Repeat a minimum of two more times, do not flush out on last action.
9. Achieve contact time with hoses submerged for the appropriate timeframe outlined in the chosen cleaning solution IFU.
10. Purge cleaning solution from channels while fully immersed.
11. Repeat steps 7-10 until all hoses have been flushed and purged.
12. Discard cleaning solution.
13. Use a syringe to push fresh water through hoses to remove all cleaning solution.
14. Thoroughly wash exterior of all hoses with fresh water to remove all traces of cleaning solution.
15. Remove hoses from sink and hold in a vertical position to allow water to drain out. Use a syringe or medical air supplied air gun to purge any remaining water from the inside of the hose.
 - a. Dry in a drying cabinet where possible.
 - b. Dry with medical grade air where possible.
16. Remove hoses from the **Washer Rack Hose Connection Kit**.
17. Hang hoses back inside endoscope cabinet connected to forced air for additional drying.

BATCH WASHERS

RECOMMENDED STEPS:

1. Attach hoses to a **Washer Rack Hose Connection Kit** and attach to a washer rack.
 - a. Insert barb by inserting it into a rubber grommet
 - b. or remove barb and utilise luer fitting onto suitable washer rack luer connection
 - c. or remove luer fitting slip hose over a suitable injector barb on washer rack
 or
2. Connect the male luer ends of the **Endoscope Vacuum Hose Kit** to a washer rack for cannulated items.
3. Run the washer on an appropriate setting for model and chemicals used.
4. Remove hoses from washer rack and hold in a vertical position to allow water to drain out. Use a syringe or medical air supplied air gun to purge any remaining water from the inside of the hoses.
 - a. Dry in a drying cabinet where possible.
 - b. Dry with medical grade air where possible.
5. Remove hoses from the **Washer Rack Hose Connection Kit**.
6. Hang hoses back inside endoscope cabinet connected to forced air for additional drying.

STERILISING FOR STERILE STORAGE

RECOMMENDED STEPS:

After Manual or Automated disinfection of the hose kits, it is at times efficient to sterilise the hose kit for external storage, this especially applies to sites that use a secondary hose kit (Swap out hose kit for cleaning). By doing this you can achieve 7 days or more storage prior to use in the cabinet.

RECOMMENDED STEPS:

1. Take disinfected and dried hoses from cleaning area or drying cabinet.
2. Add hoses individually or in appropriate groups into a stripeel bag or on a tray and wrapped in sterilization wrap (AKA Kimguard).
3. Put into steriliser on a suitable cycle that does not exceed 121°C.
4. At completion of cycle, remove from the steriliser and store in an appropriate storage environment (sterile storeroom).
5. When required, hoses can be removed from sterile packaging and hung directly into the cabinet.
6. Note: Regular sterilisation of **Endoscope Vacuum Hose Kits** may have a detrimental effect on the materials and replacement may be required.