



SYNERGY

INNOVATIVE DIVING EQUIPMENT TRADING LLC

INSPIRING • ENGINEERING • INNOVATION



THREE DIVER D023 AIR PANEL - SY-3DAPD023-R-XDV



PART NO : SY-3DAPD023-R-3DV

Three Diver Air Panel with D1/D2/D3 cctv system

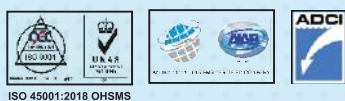


THREE DIVER D023 AIR PANEL - SY-3DAPD023-R-XDV



PART NO : SY-3DAP-D023-R-3DV

Three Diver Air Panel with D1/D2/D3
cctv system





THREE DIVER D023 AIR PANEL - SY-3DAPD023-R-XDV

Information

Three Diver Panel

Case	Model 1630, Black, Interior (27.70" L x 20.98" W x 15.50" H), with wheels and handle, water, rust and dust proof), Pelican USA Exterior dimensions: 79.45 x 61.49 x 44.39cm (31.28" x 24.21" x 17.48") Interior dimensions: 70.35 x 53.28 x 39.37cm (27.70" x 20.98" x 15.50")
------	--

1 x 0-230 fsw/70 msw Depth gauge, 3.5", 0.25 % accuracy, mirror scale, with calibration point, Diver 1, Color coded **Green** 

1 x 0-230 fsw/70 msw Depth gauge, 3.5", 0.25 % accuracy, mirror scale, with calibration point, Diver 2, Color coded **Blue** 

1 x 0-230 fsw/70 msw Depth gauge, 3.5", 0.25 % accuracy, mirror scale, with calibration point, Diver 3, Color coded **Red** 

Air / Gas Supplies	HP Air- Independent line per diver LP Air - Independent line per diver
Regulator	High pressure regulator 6000 psi inlet, 400 psi outlet
Relief valves	0-250 psi on regulated diver supply line, 100 psi on pneumo gauges
Air supply ports	All fittings provided behind the panel, with each line labelled. No hoses or connections criss crossing the front of the panel.
Analysis	Individual Oxygen analyzer with hi low alarm and flow meter per diver
Communication	Three Diver Amron Radio 2830A/11 with ac/dc power supply
Calibration	Inbuilt calibration points for pneumo gauges
Power supply	Works on 220v with 12v adapter, and on 12v battery, provided with digital amp/voltmeter to check incoming supply

Optional :

Diver CCTV	Can be provided for Diver 1/Diver 2/Diver 3
Supervisor CCTV	Provided with panel (optional)
Monitor	TFT 15.5" (splitter will be provided if diver CCTV options are required)
Surface control unit	Video / light control, patented design, outland/synergy design, usa
Primary recording	Mini Dvr with 128gb SD card per diver video or 1TB hard drive
Backup recording	1 TB backup hard drive to record all diver video simultaneously
Usb Out	To retrieve data onto a usb memory drive from hard drives
HDMI Out	To mirror broadcast diving operations work via hdmi cable to remote monitor
Control Switches	Touch button switches with backlight for low visibility weather conditions
Light Control	Dimmer switch, knob type

AMRON INTERNATIONAL - MASTER DISTRIBUTOR

SY-2830A-11 AMCOM III Three-Diver Rechargeable Portable Communicator with Outdoor AC Power Module and International Locking Power Cord



NEWLY DESIGNED ENHANCEMENTS:

High Audio Fidelity

Ultra-low noise circuit combined with noise suppression circuitry produces crystal clear speech. Automatic gain adjustment will guard audio signal from distortion, enhance speaker protection and audio quality. Increases band width 47%.

Extended Battery Operation Time

Audio amplifier card deploys the state-of-the-art Class-D digital audio power amplifier. Has very low power dissipation, produces less heat, and extends battery life up to 32%.

Flexible Gain Settings

The audio amplifier card has adjustable gain settings to accommodate different communication applications and environments.

Ultra-Low Electromagnetic Interference (EMI)

EMI is achieved through spread-spectrum and de-phase control techniques providing for optimum integration with diving systems.

Outdoor Rated AC Power Module

Weather resistant, IP65 rated AC power entry module accommodates country specific AC power cords.

Country Specific V-Lock AC Power Cord

At time of order, simply choose the IP54 rated Locking AC power cord you need.



AMRON INTERNATIONAL - MASTER DISTRIBUTOR

FEATURES:

- Separate channels and volume controls for each diver and tender to accommodate individual earphone and microphone adjustments, equipment variations and individual comfort levels.
- Divers' umbilicals can be set to 4-wire mode (full duplex) or 2-wire mode (push-to-talk) or any combination of the two modes for any diver.
- Ability to use both dynamic and pre-amplified diver microphones with a unique circuit that detects microphone type and automatically adjusts volume levels.
- Weatherproof push-to-talk microphone for better voice intelligibility topside. For optimum clarity, see Tech Note (below) for other recommended equipment.
- Internal charger allows for simultaneous charging and operation of the unit while protecting the rechargeable battery from being over-charged. Automatically supplies power to the audio amplifier when AC power is disconnected to allow for continued operation.

SPECIFICATIONS:

- Input Impedance (Each Input): 250 Ohms
- Frequency Response: 300 - 10000 Hz
- Common Mode Rejection: 40 dB Minimum
- Current Drain Maximum Full Volume: 3 Amps
- Minimum Quiescent: 0.190 Amps
- Output Impedance: 4 Ohm
- Power Supply Voltage: 12 VDC Nominal (9 Volts Minimum - 16 Volts Maximum)
- AC Power Operating Range: 90-264 VAC, 50-60 Hz
- Sensitivity (Input): 5 mV
- Output Power (RMS @ 4 Ohm Load, 12 VDC): 10 Watts Audio
- Battery Life: 41 hours
- Dimensions: 10 in. H x 9 in. W x 14.5 in. L (25.4 cm x 22.9 cm x 36.8 cm)
- Weight: 17.05 Lbs. (7.73 Kg)

INCLUDED WITH COMMUNICATOR:

AMCOM™ III 2830A-11 Three-Diver Portable Communicator with AC Power, Internal Charger and Rechargeable **Battery includes:**

- (1) SY-2405-28 Amron Hand-Held Push-to-Talk Microphone
- (1) SY-2890-05 Amron 12 VDC Sealed Lead Acid Gel-Cell Rechargeable Battery with Slide terminals
- (1) SY-283XA-UM Amron Three-Diver Portable Communicator User Manual

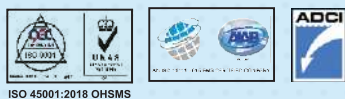
AVAILABLE OPTIONS:

- SY-2460SM-28 Amron Single Muff Operator Headset with Boom Mic and Dual Banana Plugs
- SY-2401-28 Amron Deluxe Headset with Boom Mic
- SY-2822-28 Amron Remote Walk-and-Talk (4-wire mode)
- SY-2821-28 Amron Remote Walk-and-Talk (2-wire mode)

POWER CORD 6.5 FT. OPTIONS:

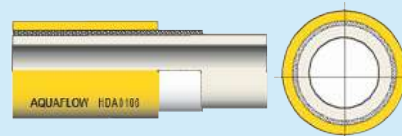
TECH NOTE:

All communicators will inherently transfer topside noise to the divers when the tender speaks directly into the communicator's panel speaker. To eliminate background noise at the surface, use the 2405-28 Push-to-Talk Microphone, included with this model. For optimum communications, we recommend purchasing the 2401-28 Deluxe Headset with Boom Mic, topside. For tender mobility, use the 2401-28 Deluxe Headset with Boom Mic along with the 2822-28 Remote Walk-and-Talk (4-wire mode) or the 2821-28 Remote Walk-and-Talk (2-wire mode). For wireless tender communications, order the 2830A-03 Three-Diver Deluxe Portable Communicator with Wireless Tender.



SYNERGY SURFACE DIVING HOSES AND UMBILICALS SY-AQUAFLOW

Known worldwide for its lightweight and ultra flexible construction, Aquaflow hoses are ideal for surface demand applications. Aquaflow kink resistant construction comprises of an extruded core tube, reinforcement of high strength yarn and a bonded outer cover. Both tube and cover are extruded from high performance thermoplastic polymers which are particularly clean and free from odors often associated with conventional rubber hoses. Coupled with the wide operating temperature range this ensures breathing gas quality is maintained under all conditions from -20°C to +66°C.



PartNo.	Nominal Bore		O.D.		Min. bend radius		Working pressure		Nom. burst pressure		Weight in air		Weight in sea water		Typical application
	in	mm	in	mm	in	mm	psi	bar	psi	bar	lb/ft	g/m	lb/ft	g/m	
SY-HDA0104	1/4	6.3	0.50	12.7	1.25	32	300	21	1200	84	0.078	116	-0.009	-14	Pneumo
SY-HDA0106	3/8	9.5	0.66	16.8	2	50	500	35	2000	140	0.119	177	-0.034	-50	Air/gas
SY-HDA1108	1/2	12.7	0.83	21.0	3	76	300	25	1200	84	0.178	265	-0.054	-80	Hotwater

Aquaflow Umbilicals



Lightweight, ultra flexible and kink resistant, Aquaflow Umbilicals are ideal for breathing gas supply, comms and pneumo service for surface demand umbilicals. They can be produced in production runs up to 740 meters long and can be over extruded or braided for additional protection against abrasion and use in contaminated waters.

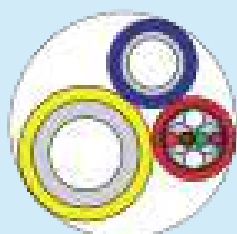
The unique materials and cabled “rope-like” construction combine to produce the most flexible, controlled buoyancy umbilicals available today. The umbilicals have no need

for tape, the repairs are much reduced and they have a longer life. They keep the professional diver safer and more efficient both while diving and on deck. They will ultimately reduce costs for the operator. The highest quality materials, workmanship with competitive pricing and unmatched service to our clients worldwide. SYNERGY invites you to visit our website or contact us directly so that we can assist you with all your Diving Umbilical needs.

SYNERGY SURFACE DIVING HOSES AND UMBILICALS SY-AQUAFLOW

SY-UDA0103

3 part surface demand



SY-UDA0204

3 part plus video



OUTLAND VIDEO CAMERA / LIGHTS / UMBILICALS

Mechanical	Specification
Weight	6 oz (.2kg) Dry, 3 oz(.06kg) wet
Depth Rating	2000 ft (600m)
Housing	Black delrin
Electrical	
Image Device	1/3" CCD sensor (412k pixel)
Sensitivity	.001 lux @f1.4
Resolution	600 TV lines standard
Video Out	1.2 Vpp
Power	12 VDC @ 110 ma.
Optical	
Lens	3.6mm, Electronic-Iris
Focus	Fixed 4" to infinity
Angle of View	70 horz. (in water)



PART NO : SY-UWC-325/p/e



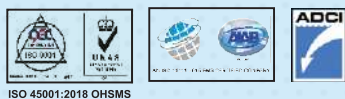
PART NO : SY-UWL-401

Mechanical	Specification
Weight	7oz(0.2kg) Dry, 3 oz.(.1kg) Wet
Depth Rating	2000 ft (600m)
Housing	6061-16 Anodized Aluminium
Electrical	
Power	12 VDC @ 110 ma.
Wattage	18 watt (Eq to 150 watt halogen)
Output	700 lux at 1 meter
Optical	
Lens	3.6mm, Electronic-Iris
Focus	Fixed 4" to infinity
Angle of View	70 horz. (in water)

Mechanical	Specification
Conductors	16ea #22 awg 1 RG-59 Coax
Length (mtrs)	100/150/200 as per requirement
Diameter	8.5mm (0.35")
Materials	Orange Polyurethane jacket
Breaking Strength	1200 lbs
End fittings	
Diver End	Moulded Y connection
Camera	Rmk-5-fs with locking sleeve
Light	Rmg-3-fs with locking sleeve
Surface end	Soldered connection
Cable	8 pin amphenol connector



PART NO : SY-VC-150M



SYNERGY PIGTAILS AND CONNECTORS

Connector	SY-RMK-5-FS
Type	5 Female Sockets
Cable	18 in Pigtail of 18 SO AWG Cable
Material	Special Neoprene, Molded
Contacts	Copper Alloy, Hard Gold Plated per ASTM-B-488
Voltage Rating	600 VDC
Pressure Rating, Mated	Up to 20,000 psi
Mates with	SY-XSL-5-BCL on Outland Camera SY-UWC-325/p/e

PART NO : SY-RMK-5-FS



Locking sleeve for Rmk-5-fs

PART NO : SY-K-FLS-D

PART NO : SY-RMG-3FS



Locking sleeve for Rmg-3-fs

PART NO : SY-G-FLS-D

Connector	SY-RMG-3-FS
Type	3 Female Sockets
Cable	18 in Pigtail of 18 SO AWG Cable
Material	Special Neoprene, Molded
Contacts	Copper Alloy, Hard Gold Plated per SY-ASTM-B-488
Voltage Rating	600 VDC
Pressure Rating, Mated	Up to 20,000 psi
Mates with	SY-XSG-3-BCL on Outland light SY-UWL-401

PART NO : SY-MS3108B-18-08P



Certifications	Provided with each system
International	IMCA D023
Manufacturer	Synergy Certificates
Electrical	Continuity/Function test



PART NO : SY-CLBRK

SS camera and light bracket with jubilee clamp

Cannon Right Angle Amphenol Connector is used for connecting the video camera umbilical to the surface video console u



CLASS WITNESS CERTIFICATES

Industry & Facilities Division
Third Party Inspection Report
Page 1 of 5

INSPECTION REPORT Nr DBA_4.20.242/IR-01 Revision Nr 0

INSPECTION REPORT Nr DBA_4.20.242/IR-01 Revision Nr 0

Initial: Interim: Final: Reopened:
 Inspection requested by: MS. Synergy Diving & Equipment Solution FZC, UAE
 Inspection performed as Recognized Authority: Yes, No
 BV code Nr: DBA_4.20.242

Project: Third Party Inspection Services IPO Ref (if applicable):
 BV Client: MS. Synergy Diving & Equipment Solution FZC, UAE
 Manufacturer/Vendor: MS. Synergy Diving & Equipment Solution FZC
 Sub-Vendor (if applicable): N/A
 Inspection Location: Al Qawas, Dubai
 Inspection performed on: 28/06/2023 (Group 1)
 Previous inspection (if applicable): N/A (Date)
 Next inspection (if applicable): TBA (Date)

MATERIAL / SUBJECT OF INSPECTION	ITEM / TAG Nr	QTY As per P/O	QTY Ordered for inspection
Three Diver Air panel - Pneumatic over inspection	Serial No. TRITON 369	01 No.	01 No.

A - INSPECTION RESULT

Satisfactory (Without comments) Satisfactory with comments (Any of trailing Parench or Note Conformity items is tick open) Not Satisfactory (NCR raised during the inspection)

Inspection Summary: (for details refer to section E)
 Witness of pneumatic over pressure test of three diver air panel, High Pressure (tested:3300 psi & Low Pressure (tested:1300 psi), Serial No.: 1001008 369, as per Annexure -A & Final calibration.

Open Non Conformities: Yes, details in section G No
Open Punch List Items: Yes, details in section H No
Release Note Issued: Yes, number(s) No
BV Traceability Stampings: Yes No

06A-01-01/03P002-En Rev. 3 Copyright Bureau Veritas 10/2019
 This template is intended exclusively when BV is acting as 3rd party inspection body. The use of present template is forbidden in the frame of 2nd party services where Client specification and templates must be used.

Industry & Facilities Division
Third Party Inspection Report
Page 2 of 5

INSPECTION REPORT Nr DBA_4.20.242/IR-01 Revision Nr 0

BV Inspector: (Name and Signature)
BV Office: Dubai
Inspection Report Date: 28/06/2023

Distribution: CLIENT BV MANUFACTURER OTHER: _____
Attachments Report: Yes, details in section J No

B - REFERENCE DOCUMENTATION: (Refer to attachment section J instead (Indicate if separate document list is provided in attachment))

Title	Reference n°	Rev.	Approval status	Approved by	Date
Diving Equipment System Inspection Guide - Pneumatic Over Pressure Test	IMCA D020	01	Approved	Synergy	July 2015
	SSEL-QMS-M-01	02	Approved	Synergy	July 2018

G - ATTENDEES

Name	Position	BV	Representing
Mr. Mohammed Sartariz	Leading Inspector		
Mr. Ajay A. Soltique	QC Engineer	Synergy	Synergy

D - MEASURING & TESTING EQUIPMENT USED (Refer to attachment section J instead (Indicate if separate equipment list is provided in attachment))

Equipment Type	Equipment Identity n°	Last Calibration Date	Expiry Date
Digital Pressure Gauge	AC-21 95009	21.01.2020	20.01.2021
Digital Pressure Gauge	83342	30.11.2019	29.11.2020

E - INSPECTION DETAILS
 E1 - Details of Witness (W) & Hold (H) Inspection Points

06A-01-01/03P002-En Rev. 3 Copyright Bureau Veritas 10/2019
 This template is intended exclusively when BV is acting as 3rd party inspection body. The use of present template is forbidden in the frame of 2nd party services where Client specification and templates must be used.

Industry & Facilities Division
Third Party Inspection Report
Page 3 of 5

INSPECTION REPORT Nr DBA_4.20.242/IR-01 Revision Nr 0

Manufacturing Progress Status
 • NI

Details of inspection Activities carried out with reference to ITP
 • Visual inspection of three diver air panel & found satisfactory
 • Verified the serial No.: TRITON - 369 of three diver SSP
 • Witnessed pneumatic over pressure of three diver air panel as per Annexure - A & found satisfactory at the time of inspection

Confirmation of certificates
 • Verified calibration certificates of measuring instruments and found satisfactory

E2 - Details of Monitoring and Surveillance Patrols Test if conducted during the visit
E3 - Details of Certificates Review Test if conducted during the visit

F - HEALTH, SAFETY & ENVIRONMENT COMMENTS
 (Comment on Observations and Actions Taken During the Inspection)
 Carried out 2 minutes safety check but No Safety Concerns were found at the time of inspection.

G - NON CONFORMITIES (Refer to attachment section J instead (Indicate if separate punch list is provided in attachment))

Item	Description	Status	Raised on	Report Nr.	Closed on	Report Nr.	Comments
1	N/A						

H - PUNCH LIST ITEMS (Refer to attachment section J instead (Indicate if separate punch list is provided in attachment))

Item	Description	Status	Raised on	Report Nr.	Closed on	Report Nr.	Comments
1	N/A						

06A-01-01/03P002-En Rev. 3 Copyright Bureau Veritas 10/2019
 This template is intended exclusively when BV is acting as 3rd party inspection body. The use of present template is forbidden in the frame of 2nd party services where Client specification and templates must be used.

Industry & Facilities Division
Third Party Inspection Report
Page 4 of 5

INSPECTION REPORT Nr DBA_4.20.242/IR-01 Revision Nr 0

J - DIGITAL PICTURES

06A-01-01/03P002-En Rev. 3 Copyright Bureau Veritas 10/2019
 This template is intended exclusively when BV is acting as 3rd party inspection body. The use of present template is forbidden in the frame of 2nd party services where Client specification and templates must be used.

Industry & Facilities Division
Third Party Inspection Report
Page 5 of 5

INSPECTION REPORT Nr DBA_4.20.242/IR-01 Revision Nr 0

J - ATTACHMENTS

Item	Attachment Name	Total Pages	Description
1	Sparing the hazard	1	2 MIN SAFETY CHECK LIST

Annexure -01

Inspection Details:

- Witnessed Pneumatic over pressure test of Three Diver air panel with the following details.

Description	Three Diver air panel
Country of origin	U.A.E
Manufacturer Serial No.	TRITON 369
Year of Manufacture	June 2020
Design pressure	LP 300 psi / HP 3000 psi
Test pressure	LP 1300 psi / HP 3300 psi
Pneumatic Test Date	28.06.2023

Pneumatic Test:

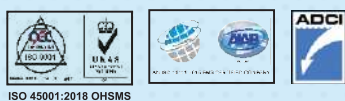
- Pneumatic over pressure test of three diver air panel (Serial No.: TRITON 369) has been witnessed as per the approved procedure and found the following:
 - Test Pressure gauge calibration certificate was reviewed and found satisfactory.
 - Low Pressure of 1300 psi was supplied to the low pressure piping of three diver air panel for 30 mins and found satisfactory at time of inspection.
 - High Pressure of 3300 psi was supplied to the high pressure piping of three diver air panel for 30 mins and found satisfactory at time of inspection.
 - Soap solution leak test was performed on piping, fittings & valves, no leakage found at the time of inspection. Results satisfactory.

END OF REPORT

06A-01-01/03P002-En Rev. 3 Copyright Bureau Veritas 10/2019
 This template is intended exclusively when BV is acting as 3rd party inspection body. The use of present template is forbidden in the frame of 2nd party services where Client specification and templates must be used.

Certifications Provided with each panel

Manufacturer	Synergy certification
International Class	IMCA D023
Warranty	Bureau Veritas pressure test certificates
Weight	1 year international manufacturer warranty
	68 kg



THREE DIVER D023 AIR PANEL - SY-3DAPD023-R-XDV

Client Optional

Tracking	Panels can be embossed with client logos, asset information, serial numbers etc on special request
----------	--

ORDERING INFORMATION

Sr.	Part Number	Description
1	SY-3DAPD023	Portable three diver air panel D023 panel, offshore, imca (no radio, no diver cctv) with analyzer panel (not shown in photo)
2	SY-3DAPD023-R	Portable three diver air panel D023 panel, offshore, imca with radio ,with analyzer panel (not shown in photo)
3	SY-3DAPD023-R-1DV	Portable three diver air panel D023 panel, offshore, imca with radio, analyzer panel and diver 1 cctv
4	SY-3DAPD023-R-2DV	Portable three diver air panel D023 panel, offshore, imca with radio, analyzer panel and diver 1/diver 2 cctv
5	SY-3DAPD023-R-3DV	Portable three diver air panel D023 panel, offshore, imca with radio, analyzer panel and diver 1/diver 2/diver 3 cctv

BESPOKE DESIGNS – ANY CONFIGURATION AS PER CLIENT REQUIREMENT

SYNERGY INFRASTRUCTURE





SYNERGY

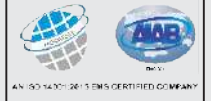
INNOVATIVE DIVING EQUIPMENT TRADING LLC

INSPIRING • ENGINEERING • INNOVATION

UAE • UK



ISO 45001:2018 OHSMS



THREE DIVER NITROX MIX GAS PANEL - SY-3DAPD023-R-3DV

Contact us

P.O. Box – 237849, Warehouse No 8,
Al Maidoor Warehouse, Al Qusais,
Industrial Area - Dubai - UAE

- Tel : 009714 2580533
- Fax : 009714 2580534
- UAE : 00971505648178
- UK : 00447951966260

- Website : www.synergyequipment.com
- Email : ram@synergyequipment.com
- For Sale : info@synergyequipment.com

