

SBE 37-IM,IMP,IMP-ODO MicroCAT Configurations

Model	37-IM	37-IMP	37-IMP-ODO
Housing	1 - 350 m (plastic) 3 - 7000 m (titanium)	1 - 350 m (plastic) 3 - 7000 m (titanium)	1 - 350 m (plastic) 3 - 7000 m (titanium)
Pressure Sensor/Range	0 - none 1 - 20 m strain gauge 2 - 100 m strain gauge 3 - 350 m strain gauge 4 - 600 m strain gauge 5 - 1000 m strain gauge 6 - 2000 m strain gauge 7 - 3500 m strain gauge 8 - 7000 m strain gauge	0 - none 1 - 20 m strain gauge 2 - 100 m strain gauge 3 - 350 m strain gauge 4 - 600 m strain gauge 5 - 1000 m strain gauge 6 - 2000 m strain gauge 7 - 3500 m strain gauge 8 - 7000 m strain gauge	0 - none 1 - 20 m strain gauge 2 - 100 m strain gauge 3 - 350 m strain gauge 4 - 600 m strain gauge 5 - 1000 m strain gauge 6 - 2000 m strain gauge 7 - 3500 m strain gauge 8 - 7000 m strain gauge
Connector	0 - none	0 - none	0 - none

Communications	0 - Inductive Modem	0 - Inductive Modem	0 - Inductive Modem
SBE 63 Optical Dissolved Oxygen	0 - none	0 - none	2 - 600 m 3 - 5000 m 4 - 7000 m

SBE 37-IM MicroCAT C-T (P) Recorder


Example: 37IM.13000 is an SBE 37-IM with 350 m housing and 350 m strain gauge pressure sensor. See table below for description of each selection:

PART #	DESCRIPTION	NOTES
37IM	<p>MicroCAT C and T (pressure optional) Recorder with Inductive Modem</p> <p>- Includes mooring clamp for jacketed wire, 8 MB Flash memory, lithium battery (non-hazardous), AF24173 Anti-Foulant Devices, Seasoftware, and complete documentation.</p>	<p>37-IM MicroCAT includes:</p> <ul style="list-style-type: none"> • Inductive Modem interface • Memory <p>Communicating with 1 or more 37-IMs requires use of Sea-Bird Inductive Modem Module (IMM) or Surface Inductive Modem (SIM), which provide serial interface between user's computer & up to 100 IM instruments coupled to single cable. Purchase IMM/SIM & optional Inductive Cable Coupler (ICC) separately.</p> <p>Compare features of the numerous SBE 37 MicroCAT models.</p>

SBE 37-IM Housing (depth) Selections — MUST SELECT ONE


37IM.1x000	350 m plastic housing	
37IM.3x000	7000 m titanium housing	

SBE 37-IM Pressure Sensor Range (depth) Selections — MUST SELECT ONE

37IM.x0000	No pressure sensor	 <p>Pressure sensor is installed in end cap, & is not field replaceable / swappable. While highest pressure rating gives you most flexibility in using MicroCAT, it is at expense of accuracy & resolution. It is advantageous to use lowest range pressure sensor compatible with your intended maximum operating depth, because accuracy & resolution are proportional to pressure sensor's full scale range. For example, comparing 2000 & 7000 m sensors:</p> <ul style="list-style-type: none"> 2000 m sensor: initial accuracy = 2 m (= 0.1% * 2000 m), resolution = 0.04 m (= 0.002% * 2000 m)
37IM.x1000	20 m strain gauge pressure sensor	
37IM.x2000	100 m strain gauge pressure sensor	
37IM.x3000	350 m strain gauge pressure sensor	

37IM.x4000	600 m strain gauge pressure sensor	<ul style="list-style-type: none">7000 m sensor: initial accuracy = 7 m (= 0.1% * 7000 m), resolution = 0.14 m (= 0.002% * 7000 m)
37IM.x5000	1000 m strain gauge pressure sensor	
37IM.x6000	2000 m strain gauge pressure sensor	
37IM.x7000	3500 m strain gauge pressure sensor	
37IM.x8000	7000 m strain gauge pressure sensor	

SBE 37-IM Mooring Clamp Wire Size Selections (Specify clamp to match O.D. of mooring wire jacket) — MUST SELECT ONE

50357.I	Wire guide & mounting clamp for 1/4 in. diameter mooring wire	 <p>Cable fits loosely through IM coupling core / wire guide, & is clamped only at mounting clamp. See document 67142. 'I' designation indicates that guide and clamp are to be installed on instrument at factory.</p> <p>Thread for clamping to mooring cable:</p> <ul style="list-style-type: none"> • 1/4 in. diameter: 1/4-28 UNF • 5/16 in./8 mm diameter: 5/16-24 UNF • 3/8 in. diameter: 3/8-24 UNF • 1/2 in. diameter: 9/16-12 UNC • 5/8 in./16 mm diameter: 5/8-18 UNF • 6 mm diameter: 1/4-20 UNF • 10 mm diameter: 7/16 -14 UNF • 12 mm diameter: 1/2-13 UNF <p>Clamp Size Note: Mooring wire is typically specified by wire size, not by outer diameter (O.D.) of the mooring wire jacket. Verify the wire jacket O.D. before selecting the clamp size. The clamp size must be less than or equal to the wire jacket O.D. but larger than the wire diameter. For example, Mooring System Inc.'s</p>
50358.I	Wire guide & mounting clamp for 5/16 in. or 8 mm diameter mooring wire	
50359.I	Wire guide & mounting clamp for 3/8 in. diameter mooring wire	
50360.I	Wire guide & mounting clamp for 1/2 in. diameter mooring wire	
50362.I	Wire guide & mounting clamp for 6 mm diameter mooring wire	

50364.I	Wire guide & mounting clamp for 10 mm diameter mooring wire	specifications for 3x19 wire rope (in 2016) are as follows:																			
50365.I	Wire guide & mounting clamp for 12 mm diameter mooring wire																				
50361.I	Wire guide & mounting clamp for 5/8 in. or 16 mm diameter mooring wire		<table><tr><th>Wire Diameter</th><th>Jacket Diameter</th><th>Recommended Sea-Bird Clamp</th></tr><tr><td>3/16 inch (5.0 mm)</td><td>0.255 inch (6.5 mm)</td><td>1/4 inch</td></tr><tr><td>1/4 inch (6.5 mm)</td><td>0.330 inch (8.4 mm)</td><td>5/16 inch</td></tr><tr><td>5/16 inch (8.0 mm)</td><td>0.392 inch (9.9 mm)</td><td>3/8 inch</td></tr><tr><td>3/8 inch (9.5 mm)</td><td>0.453 inch (11.5 mm)</td><td>10 mm (0.394 inch)</td></tr><tr><td>7/16 inch (11.1 mm)</td><td>0.5 inch (12.7 mm)</td><td>1/2 inch</td></tr></table>	Wire Diameter	Jacket Diameter	Recommended Sea-Bird Clamp	3/16 inch (5.0 mm)	0.255 inch (6.5 mm)	1/4 inch	1/4 inch (6.5 mm)	0.330 inch (8.4 mm)	5/16 inch	5/16 inch (8.0 mm)	0.392 inch (9.9 mm)	3/8 inch	3/8 inch (9.5 mm)	0.453 inch (11.5 mm)	10 mm (0.394 inch)	7/16 inch (11.1 mm)	0.5 inch (12.7 mm)	1/2 inch
			Wire Diameter	Jacket Diameter	Recommended Sea-Bird Clamp																
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SBE 37-IM Spares & Accessories

801542

AF24173
Anti-Foulant
Device pair
(spare, bagged,
labeled for
shipping)



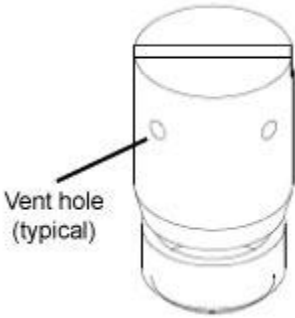
Anti-foulant devices fit into anti-foulant device cups at each end of conductivity cell. Anti-foulant devices included with standard shipment; these are spares.


Useful life varies, depending on several factors. We recommend that customers consider more frequent replacement when high biological activity & strong current flow (greater dilution of anti-foulant concentration) are present. Moored instruments in high growth & strong dilution environments have been known to obtain a few months of quality data, while drifters that operate in non-photoc, less turbid deep ocean environments may achieve years of quality data. Experience may be strongest determining factor in specific deployment environments.

50441	SBE 37 & 44 lithium batteries (spare), package of twelve 3.6V AA cells (Saft LS 14500)	<p>One set of batteries is included with standard shipment; 50441 are spares. Batteries are easily accessed by removing 2 screws from connector end cap & pulling out end cap. Shipping restrictions apply for lithium batteries; see SBE 37-IM manual for details. Click here to buy Saft LS 14500 from Amazon.</p> <p>In 2008, original battery pack was replaced with red top battery holder, which uses 12 AA lithium batteries instead of 50243.1 battery set. See Application Note 89 for details.</p>
801797	Red top battery holder (7V nominal, Version 1) for use with twelve 3.6V AA lithium cells, for SBE 37 (SM, SMP, IM, IMP with firmware version < 4.0) & SBE 44	<p>801797 is battery holder, without batteries.</p> <p>Price for 50442, which includes both battery holder (801797) & batteries (50441), is less than price when ordering battery holder & batteries separately. Sea-Bird is helping to absorb some cost for new battery holders by providing a reduced price.</p> <p>Note: Newer MicroCATs (SMP & IMP with firmware > 4.0, and all IDO & ODO MicroCATs) use a battery pack with a yellow cover plate; the wiring of that pack is different from this one, and cannot be used with SBE 37-IM.</p>

50442	<p>Red top battery holder (7V nominal, Version 1) (PN 801797) and twelve AA lithium cells (PN 50441), for SBE 37 (SM, SMP, IM, IMP with firmware version < 4.0) and SBE 44</p>	<div data-bbox="761 338 1019 1026" data-label="Image"> </div> <p>801797 shown with 50441 cells installed</p> <p>(Note: Cells cannot be shipped installed in battery holder)</p> <div data-bbox="1052 275 1369 432" data-label="Image"> </div> <p>Cells packed in heat-sealed plastic (above), then placed in bubble-wrap outer sleeve & strong packaging for shipment (below)</p> <div data-bbox="1052 833 1369 1146" data-label="Image"> </div>
801836	<p>37-IM/IMP/IMP-OD O/IMP-IDO and 39plus Internal Data I/O cable, 0.3 m (DN 33406)</p>	<p>For uploading data quickly using internal RS-232 connector.</p>

233540	Anti-foulant cap without hose barb, black (for use with SBE 37 [SM, SMP, IM, IMP, SI, SIP] with firmware version < 4.0)	<p>Anti-foulant cap holds AF24173 Anti-Foulant Device in place.</p> <p>Note: Do not deploy MicroCAT with barbed anti-foulant device cap(s)!</p>
50087.1	Cell filler/storage device with hose barbs (Application Note 34)	<p>This kit includes a syringe & tubing assembly, & 2 anti-foulant device caps with hose barbs. Remove installed anti-foulant device cap(s) & replace them with caps with hose barbs for cleaning & storage only.</p> <ul style="list-style-type: none"> • Cleaning instructions require use of syringe & tubing assembly at intake end of conductivity cell (requiring 1 barbed cap). • Storage instructions require looping Tygon tubing from end to end of conductivity cell (requiring 2 barbed caps). <p>Do not deploy MicroCAT with barbed anti-foulant device cap(s)!</p>

233186	<p>High-head pressure port plug for muddy/biologically productive environments (Application Note 84), for use with SBE 37 [SM, SMP, IM, IMP, SI, SIP] with firmware version < 4.0</p>	 <p><i>High-Head Pressure Port Plug, Part Number 233186</i></p> <p>This pressure port plug extends beyond surface of instrument end cap, and has 4 horizontal vent holes connecting internally to a vertical vent hole. If you are deploying 37-IM in an orientation close to horizontal, with pressure port up, horizontal orientation of vent holes prevents deposit of sediment inside pressure port. Each of the 4 vent holes is larger than single vent hole in standard pressure port plug, significantly reducing possibility that biological growth will cover all holes. See Application Note 84.</p>
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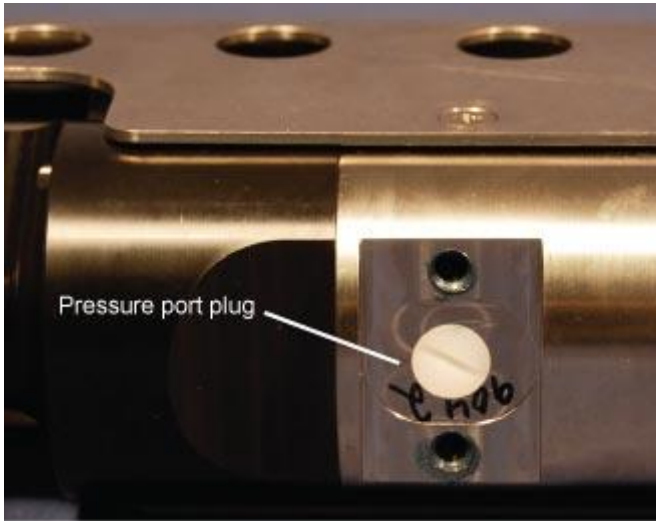
31632	Storm Shipping Case (iM2950) - holds up to 4 SBE 37IMs	 <p>Storm shipping case with custom foam inserts holds up to 4 MicroCATs that do not include dissolved oxygen — IMP, IM, SMP, SM, SIP, SI.</p> <ul style="list-style-type: none"> • Injection molded case with HPX resin plastic body, recessed wheels, automatic pressure equalization valve, hinged push-button latches, fold-down padded handle, & O-ring seal. Meets airline luggage regulations. • Inner dimensions: 29 x 18 x 10.5 inches (74 x 46 x 27 cm). • Outer dimensions: 31.3 x 20.4 x 12.2 inches (80 x 52 x 31 cm).
<p>For Surface Inductive Modem (SIM), Inductive Modem Module (IMM), and Inductive Cable Coupler (ICC), see separate listings.</p>		

SBE 37-IMP MicroCAT C-T (P) Recorder


Example: 37IMP.13000 is an SBE 37-IMP with 350 m housing and 350 m strain gauge pressure sensor. See table below for description of each selection:

PART #	DESCRIPTION	NOTES
37IMP	MicroCAT C and T (pressure optional) Recorder with Inductive Modem, and internal Pump - Includes mooring clamp for jacketed wire, 8 MB Flash memory, lithium battery (non-hazardous), AF24173 Anti-Foulant Devices, Seasoft software, and complete documentation.	<p>37-IMP MicroCAT includes:</p> <ul style="list-style-type: none"> • Inductive Modem interface • Memory • internal, integral Pump — pump provides improved conductivity response & improved anti-foul protection over 37-IM <p>Communicating with 1 or more 37-IMPs requires use of Sea-Bird Inductive Modem Module (IMM) or Surface Inductive Modem (SIM), which provide serial interface between user's computer & up to 100 IM instruments coupled to single cable. Purchase IMM/SIM & optional Inductive Cable Coupler (ICC) separately.</p> <p>Compare features of the numerous SBE 37 MicroCAT models.</p>
SBE 37-IMP Housing (depth) Selections — MUST SELECT ONE		
37IMP.1x000	350 m plastic housing	
37IMP.3x000	7000 m titanium housing	

SBE 37-IMP Pressure Sensor Range (depth) Selections — MUST SELECT ONE


37IMP.x0000	No pressure sensor	 <p>Pressure sensor is installed in end cap (behind mount clamp), & is not field replaceable / swappable. While highest pressure rating gives you most flexibility in using MicroCAT, it is at expense of accuracy & resolution. It is advantageous to use lowest range pressure sensor compatible with your intended maximum operating depth, because accuracy & resolution are proportional to pressure sensor's full scale range. For example, comparing 2000 & 7000 m sensors:</p> <ul style="list-style-type: none"> • 2000 m sensor: initial accuracy = 2 m (= 0.1% * 2000 m), resolution = 0.04 m (= 0.002% * 2000 m) • 7000 m sensor: initial accuracy = 7 m (= 0.1% * 7000 m), resolution = 0.14 m (= 0.002% * 7000 m)
37IMP.x1000	20 m strain gauge pressure sensor	
37IMP.x2000	100 m strain gauge pressure sensor	
37IMP.x3000	350 m strain gauge pressure sensor	
37IMP.x4000	600 m strain gauge pressure sensor	
37IMP.x5000	1000 m strain gauge pressure sensor	

37IMP.x6000	2000 m strain gauge pressure sensor	
37IMP.x7000	3500 m strain gauge pressure sensor	
37IMP.x8000	7000 m strain gauge pressure sensor	
<div style="background-color: #e0f2f7; padding: 10px;"> SBE 37-IMP Mooring Clamp Wire Size Selections (Specify clamp to match O.D. of mooring wire jacket) — MUST SELECT ONE </div>		

50484.I	Wire guide & mounting clamp for 1/4 in. diameter mooring wire	 <p>Mounting Clamp. 37-IMP clamped to mooring cable here.</p> <p>Wire Guide. Contains modern coupling toroid. Cable goes through here but is not clamped, to avoid putting through tension on end cap (which could pull off end cap).</p> <p>Cable fits loosely</p> <p>through IM coupling core / wire guide, & is clamped only at mounting clamp. See document 67220. 'I' designation indicates that guide and clamp are to be installed on instrument at factory.</p> <p>Thread for clamping to mooring cable:</p> <ul style="list-style-type: none"> • 1/4 in. diameter: 1/4-28 UNF • 5/16 in./8 mm diameter: 5/16-24 UNF • 3/8 in. diameter: 3/8-24 UNF • 1/2 in. diameter: 9/16-12 UNC • 5/8 in./16 mm diameter: 5/8-18 UNF • 6 mm diameter: 1/4-20 UNF • 10 mm diameter: 7/16 -14 UNF • 12 mm diameter: 1/2-13 UNF <p>Clamp Size Note: Mooring wire is typically specified by wire size, not by outer diameter (O.D.) of the mooring wire jacket. Verify the wire jacket O.D. before selecting the clamp size. The clamp size must be less than or equal</p>
50572.I	Wire guide & mounting clamp for 5/16 in. or 8 mm diameter mooring wire	
50489.I	Wire guide & mounting clamp for 3/8 in. diameter mooring wire	
50574.I	Wire guide & mounting clamp for 1/2 in. diameter mooring wire	

50571.I	Wire guide & mounting clamp for 6 mm diameter mooring wire	to the wire jacket O.D. but larger than the wire diameter. For example, Mooring System Inc.'s specifications for 3x19 wire rope (in 2016) are as follows:
50578.I	Wire guide & mounting clamp for 10 mm diameter mooring wire	
50579.I	Wire guide & mounting clamp for 12 mm diameter mooring wire	
50576.I	Wire guide & mounting clamp for 5/8 in. or 16 mm diameter mooring wire	

Wire Diameter	Jacket Diameter	Recommended Sea-Bird Clamp
3/16 inch (5.0 mm)	0.255 inch (6.5 mm)	1/4 inch
1/4 inch (6.5 mm)	0.330 inch (8.4 mm)	5/16 inch
5/16 inch (8.0 mm)	0.392 inch (9.9 mm)	3/8 inch
3/8 inch (9.5 mm)	0.453 inch (11.5 mm)	10 mm (0.394 inch)

		<table> <tr> <td>7/16 inch (11.1 mm)</td><td>0.5 inch (12.7 mm)</td><td>1/2 inch</td></tr> </table>	7/16 inch (11.1 mm)	0.5 inch (12.7 mm)	1/2 inch
7/16 inch (11.1 mm)	0.5 inch (12.7 mm)	1/2 inch			
SBE 37-IMP Spares & Accessories					
801542	AF24173 Anti-Foulant Device pair (spare, bagged, labeled for shipping)	 <p>AF24173 Anti-Foulant Device</p> <p>Anti-foulant devices fit into anti-foulant device cups at each end of conductivity cell. Anti-foulant devices included with standard shipment; these are spares.</p> <p>Useful life varies, depending on several factors. We recommend that customers consider more frequent replacement when high biological activity & strong current flow (greater dilution of anti-foulant concentration) are present. Moored instruments in high growth & strong dilution environments have been known to obtain a few months of quality data, while drifters that operate in non-photoc, less turbid deep ocean environments may achieve years of quality data. Experience may be strongest determining factor in specific deployment environments.</p>			

50441	SBE 37 & 44 lithium batteries (spare), package of twelve 3.6V AA cells (Saft LS 14500)	<p>One set of batteries is included with standard shipment; 50441 are spares. Batteries are easily accessed by removing 2 screws from connector end cap & pulling out end cap. Shipping restrictions apply for lithium batteries; see SBE 37-IMP manual for details. Click here to buy Saft LS 14500 from Amazon.</p> <p>801863 is battery holder, without batteries. Battery holder is included with standard shipment; this is a spare.</p> <p>Note: Older MicroCATs use a battery pack with a red cover plate; the wiring of that pack is different from this one, and cannot be used with 37-IMP MicroCATs with firmware version \geq 4.0.</p>
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801863

Yellow top battery holder (14V nominal, Version 2) for use with twelve 3.6V AA lithium cells, for pumped SBE 37 (SMP & IMP with firmware version > 4.0 & all SMP-ODO, IMP-ODO, & SMP-IDO, IMP-IDO)



801863 shown with 50441 cells installed


(Note: Cells cannot be shipped

installed in battery holder)



Cells packed in heat-sealed plastic (above), then placed in bubble-wrap outer sleeve & strong packaging for shipment (below)



801797	Red top battery holder (7V nominal, Version 1) for use with twelve 3.6V AA lithium cells, for SBE 37 (SM, SMP, IM, IMP with firmware version < 4.0) & SBE 44	
50442	Red top battery holder (7V nominal, Version 1) (PN 801797) and twelve AA lithium cells (PN 50441), for SBE 37 (SM, SMP, IM, IMP with firmware version < 4.0) and SBE 44	 <p>In 2008, original battery pack was replaced with red top battery holder, which uses 12 AA lithium batteries instead of 50243.1 battery set. See Application Note 89 for details.</p> <p>801797 is battery holder, without batteries.</p> <p>Price for 50442, which includes both battery holder (801797) & batteries (50441), is less than price when ordering battery holder & batteries separately. Sea-Bird is helping to absorb some cost for new battery holders by providing a reduced price.</p> <p>Note: Newer MicroCATs use a battery pack with a yellow cover plate (see above); wiring of that pack is different from this one, and cannot be used with 37-IMP MicroCATs with firmware version < 4.0.</p>

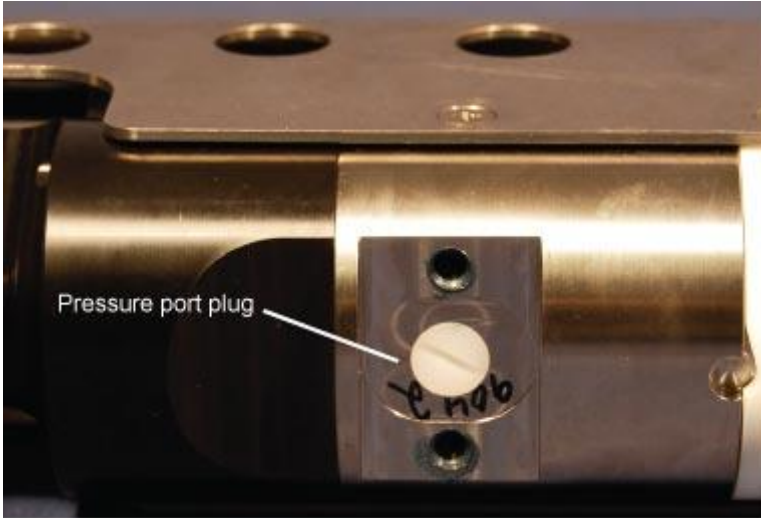
801836	37-IM/IMP/IMP-OD O/IMP-IDO and 39plus Internal Data I/O cable, 0.3 m (DN 33406)	For uploading data quickly using internal RS-232 connector.
233540	Anti-foulant cap without hose barb, black (for use with SBE 37 [SM, SMP, IM, IMP, SI, SIP] with firmware version < 4.0)	Anti-foulant cap holds AF24173 Anti-Foulant Device in place. Note: Anti-Foulant Devices are held in place by conductivity cell guard in newer 37-IMPs (firmware version > 4.0).

<p>233186</p>	<p>High-head pressure port plug for muddy/biologically productive environments (Application Note 84), for use with SBE 37 [SM, SMP, IM, IMP, SI, SIP] with firmware version < 4.0</p>	<div data-bbox="756 247 1049 567" data-label="Image"> </div> <p data-bbox="841 594 1068 678"><i>High-Head Pressure Port Plug, Part Number 233186</i></p> <p data-bbox="740 657 1370 1224">This pressure port plug extends beyond surface of instrument end cap, and has 4 horizontal vent holes connecting internally to a vertical vent hole. If you are deploying 37-IMP in an orientation close to horizontal, with pressure port up, horizontal orientation of vent holes prevents deposit of sediment inside pressure port. Each of the 4 vent holes is larger than single vent hole in standard pressure port plug, significantly reducing possibility that biological growth will cover all holes. See Application Note 84.</p> <p data-bbox="740 1329 1333 1497">Note: High-head pressure port plug is not compatible with newer 37-IMPs (firmware version > 4.0), because pressure port plug is behind mount clamp.</p>
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31632	<p>Storm Shipping Case (iM2950) - holds up to 4 SBE 37IMPs</p>	<div data-bbox="743 247 1243 835" data-label="Image"> </div> <p>Storm shipping case with custom foam inserts holds up to 4 MicroCATs that do not include dissolved oxygen — IMP, IM, SMP, SM, SIP, SI.</p> <ul style="list-style-type: none"> • Injection molded case with HPX resin plastic body, recessed wheels, automatic pressure equalization valve, hinged push-button latches, fold-down padded handle, & O-ring seal. Meets airline luggage regulations. • Inner dimensions: 29 x 18 x 10.5 inches (74 x 46 x 27 cm). • Outer dimensions: 31.3 x 20.4 x 12.2 inches (80 x 52 x 31 cm).
<p>For Surface Inductive Modem (SIM), Inductive Modem Module (IMM), and Inductive Cable Coupler (ICC), see separate listings.</p>		
<p>SBE 37-IMP-ODO MicroCAT C-T-DO (P) Recorder</p>		


Example: 37IMP.13002 is an SBE 37-IMP-ODO with 350 m housing, 350 m strain gauge pressure sensor, and integrated SBE 63 Optical Dissolved Oxygen Sensor with DO sensor rated to 600 m. See table below for description of each selection:

PART #	DESCRIPTION	NOTES
37IMP -ODO	MicroCAT C and T (pressure optional) Recorder with Integrated SBE 63 Optical Dissolved Oxygen sensor (ODO), Inductive Modem, and internal Pump - Includes mooring clamp for jacketed wire, 8 MB Flash memory, lithium battery (non-hazardous), AF24173 Anti-Foulant Devices, Seasoft software, and complete documentation.	<p>37-IMP-ODO MicroCAT includes:</p> <ul style="list-style-type: none"> • Inductive Modem interface • Memory • internal, integral Pump • integrated Optical Dissolved Oxygen sensor <p>Communicating with 1 or more 37-IMP-ODOs requires use of Sea-Bird Inductive Modem Module (IMM) or Surface Inductive Modem (SIM), which provide serial interface between user's computer & up to 100 IM instruments coupled to single cable. Purchase IMM/SIM & optional Inductive Cable Coupler (ICC) separately.</p> <p>Compare features of the numerous SBE 37 MicroCAT models.</p>
SBE 37-IMP-ODO Housing (depth) Selections — MUST SELECT ONE		


37IMP. 1x00x	350 m plastic housing	
37IMP. 3x00x	7000 m titanium housing	
SBE 37-IMP-ODO Pressure Sensor Range (depth) Selections — MUST SELECT ONE		
37IMP. x000x	No pressure sensor	 <p>Pressure sensor is installed in end cap (behind mount clamp), & is not field replaceable / swappable. While highest pressure rating gives you most flexibility in using MicroCAT, it is at expense of accuracy & resolution. It is advantageous to use lowest range pressure sensor compatible with your intended maximum operating depth, because accuracy & resolution are proportional to pressure sensor's full scale range. For example, comparing 2000 & 7000 m sensors:</p>
37IMP. x100x	20 m strain gauge pressure sensor	
37IMP. x200x	100 m strain gauge pressure sensor	
37IMP. x300x	350 m strain gauge pressure sensor	
37IMP. x400x	600 m strain gauge pressure sensor	

37IMP. x500x	1000 m strain gauge pressure sensor	<ul style="list-style-type: none">2000 m sensor: initial accuracy = 2 m (= 0.1% * 2000 m), resolution = 0.04 m (= 0.002% * 2000 m)7000 m sensor: initial accuracy = 7 m (= 0.1% * 7000 m), resolution = 0.14 m (= 0.002% * 7000 m)
37IMP. x600x	2000 m strain gauge pressure sensor	
37IMP. x700x	3500 m strain gauge pressure sensor	
37IMP. x800x	7000 m strain gauge pressure sensor	
SBE 37-IMP-ODO Optical Dissolved Oxygen Sensor Selections— MUST SELECT ONE		
37IMP. xx002	600 meter	
37IMP. xx003	5000 meter	
37IMP. xx004	7000 meter	

SBE 37-IMP-ODO Mooring Clamp Wire Size Selections (Specify clamp to match O.D. of mooring wire jacket) — MUST SELECT ONE

50484. I	Wire guide & mounting clamp for 1/4 in. diameter mooring wire	 <p>Mounting Clamp. 37-IMP-ODO clamped to mooring cable here.</p> <p>Wire Guide. Contains modem coupling toroid. Cable goes through here but is not clamped, to avoid putting through tension on end cap (which could pull off end cap).</p> <p>37-IMP-ODO shown; mooring clamp detail for 37-IMP-ODO identical</p> <p>Cable fits loosely through IM coupling core / wire guide, & is clamped only at mounting clamp. See document 67220. '.I' designation indicates that guide and clamp are to be installed on instrument at factory.</p> <p>Thread for clamping to mooring cable:</p>
50572. I	Wire guide & mounting clamp for 5/16 in. or 8 mm diameter mooring wire	
50489. I	Wire guide & mounting clamp for 3/8 in. diameter mooring wire	
50574. I	Wire guide & mounting clamp for 1/2 in. diameter mooring wire	

50571. I	Wire guide & mounting clamp for 6 mm diameter mooring wire	<ul style="list-style-type: none">• 1/4 in. diameter: 1/4-28 UNF• 5/16 in./8 mm diameter: 5/16-24 UNF• 3/8 in. diameter: 3/8-24 UNF• 1/2 in. diameter: 9/16-12 UNC• 5/8 in./16 mm diameter: 5/8-18 UNF• 6 mm diameter: 1/4-20 UNF• 10 mm diameter: 7/16 -14 UNF• 12 mm diameter: 1/2-13 UNF <p>Clamp Size Note: Mooring wire is typically specified by wire size, not by outer diameter (O.D.) of the mooring wire jacket. Verify the wire jacket O.D. before selecting the clamp size. The clamp size must be less than or equal to the wire jacket O.D. but larger than the wire diameter. For example, Mooring System Inc.'s specifications for 3x19 wire rope (in 2016) are as follows:</p> <table><tr><th>Wire Diameter</th><th>Jacket Diameter</th><th>Recommended Sea-Bird Clamp</th></tr><tr><td>3/16 inch (5.0 mm)</td><td>0.255 inch (6.5 mm)</td><td>1/4 inch</td></tr><tr><td>1/4 inch (6.5 mm)</td><td>0.330 inch (8.4 mm)</td><td>5/16 inch</td></tr><tr><td>5/16 inch (8.0 mm)</td><td>0.392 inch (9.9 mm)</td><td>3/8 inch</td></tr></table>	Wire Diameter	Jacket Diameter	Recommended Sea-Bird Clamp	3/16 inch (5.0 mm)	0.255 inch (6.5 mm)	1/4 inch	1/4 inch (6.5 mm)	0.330 inch (8.4 mm)	5/16 inch	5/16 inch (8.0 mm)	0.392 inch (9.9 mm)	3/8 inch
Wire Diameter	Jacket Diameter		Recommended Sea-Bird Clamp											
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5/16 inch (8.0 mm)	0.392 inch (9.9 mm)	3/8 inch												
50578. I	Wire guide & mounting clamp for 10 mm diameter mooring wire													
50579. I	Wire guide & mounting clamp for 12 mm diameter mooring wire													
50576. I	Wire guide & mounting clamp for 5/8 in. or 16 mm diameter mooring wire													

		<table> <tr> <td>3/8 inch (9.5 mm)</td><td>0.453 inch (11.5 mm)</td><td>10 mm (0.394 inch)</td></tr> <tr> <td>7/16 inch (11.1 mm)</td><td>0.5 inch (12.7 mm)</td><td>1/2 inch</td></tr> </table>	3/8 inch (9.5 mm)	0.453 inch (11.5 mm)	10 mm (0.394 inch)	7/16 inch (11.1 mm)	0.5 inch (12.7 mm)	1/2 inch
3/8 inch (9.5 mm)	0.453 inch (11.5 mm)	10 mm (0.394 inch)						
7/16 inch (11.1 mm)	0.5 inch (12.7 mm)	1/2 inch						
SBE 37-IMP-ODO Spares & Accessories								
80154 2	AF24173 Anti-Foulant Device pair (spare, bagged, labeled for shipping)	 <p>Anti-foulant devices fit into anti-foulant device cups at each end of conductivity cell. Anti-foulant devices included with standard shipment; these are spares.</p> <p>Useful life varies, depending on several factors. We recommend that customers consider more frequent replacement when high biological activity & strong current flow (greater dilution of anti-foulant concentration) are present. Moored instruments in high growth & strong dilution environments have been known to obtain a few months of quality data, while drifters that operate in non-photoc, less turbid deep ocean environments may achieve years of quality data.</p>						

		Experience may be strongest determining factor in specific deployment environments.
50441	SBE 37 & 44 lithium batteries (spare), package of twelve 3.6V AA cells (Saft LS 14500)	<p>One set of batteries is included with standard shipment; 50441 are spares. Batteries are easily accessed by removing 2 screws from connector end cap & pulling out end cap. Shipping restrictions apply for lithium batteries; see SBE 37-IMP-ODO manual for details. Click here to buy Saft LS 14500 from Amazon.</p> <p>801863 is battery holder, without batteries. Battery holder is included with standard shipment; this is a spare.</p>
801863	Yellow top battery holder (14V nominal, Version 2) for use with twelve 3.6V AA lithium cells, for pumped SBE 37 (SMP & IMP with firmware version > 4.0 & all SMP-ODO, IMP-ODO, SMP-IDO, & IMP-IDO)	<p>Note: Other MicroCATs use a battery pack with a red cover plate; the wiring of that pack is different from this one, and cannot be used with ODO MicroCATs (37-IMP-ODO or 37-SMP-ODO).</p>

		<div data-bbox="703 275 987 963" data-label="Image"> </div> <div data-bbox="987 245 1421 413" data-label="Image"> </div> <div data-bbox="1099 512 1325 955" data-label="Text"> <p>Cells packed in heat-sealed plastic (above), then placed in bubble-wrap outer sleeve & strong packaging for shipment (below)</p> </div> <div data-bbox="691 1001 1040 1079" data-label="Text"> <p>801863 shown with 50441 cells installed</p> </div> <div data-bbox="691 1108 1000 1192" data-label="Text"> <p>(Note: Cells cannot be shipped</p> </div> <div data-bbox="691 1220 1053 1260" data-label="Text"> <p>installed in battery holder)</p> </div>
80183 6	37-IM/IMP/IMP-OD O/IMP-IDO Internal Data I/O cable, 0.3 m (DN 33406)	<div data-bbox="660 1484 1326 1566" data-label="Text"> <p>For uploading data quickly using internal RS-232 connector.</p> </div> <div data-bbox="826 1558 1222 1871" data-label="Image"> </div>

31632	<p>Storm Shipping Case (iM2950) - holds up to 3 SBE 37IMP-ODOs</p>	<div data-bbox="857 310 1263 781" data-label="Image"> </div> <p>Case holds only 3 ODO MicroCATs (photo shows 4 non-ODO MicroCATs)</p> <p>Storm shipping case with custom foam inserts holds up to 3 ODO MicroCATs — IMP-ODO, SMP-ODO, SIP-ODO.</p> <ul style="list-style-type: none"> • Injection molded case with HPX resin plastic body, recessed wheels, automatic pressure equalization valve, hinged push-button latches, fold-down padded handle, & O-ring seal. Meets airline luggage regulations. • Inner dimensions: 29 x 18 x 10.5 inches (74 x 46 x 27 cm). • Outer dimensions: 31.3 x 20.4 x 12.2 inches (80 x 52 x 31 cm).
<p>For Surface Inductive Modem (SIM), Inductive Modem Module (IMM), and Inductive Cable Coupler (ICC), see separate listings.</p>		

