AERIAL FIRE SUPPRESSION EQUIPMENT imsheli.com



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## **Cloudburst Fire Bucket**

### Considerations for selecting a Cloudburst Fire Bucket System

#### Do you require the following?

- Multi-drop or single drop functionality
- Chemical Injection capability
- Level Limiters (provides ability to limit the volume)
- An auxiliary power source (useful when aircraft electrical power is not available)
- Shallow Fill Pump
- Hard or Soft Shell (Hard Shell has vertical battens)

#### **Electrical Power:**

Refer to the power requirements table on page 11 for details.

#### Long Line:

This length can be determined by the customer. A Long Line of 50ft/15m or greater is recommended with the Cloudburst Fire Bucket.

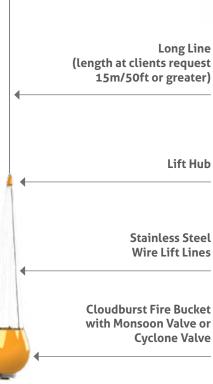
## **Configuration 1**

The Cloudburst Fire Bucket has been designed to be strong, simple, lightweight, effective and is being utilized throughout the world.

П

## Capacities

Liters
Capacity
130
200
280
420
500
640
750
880
1000
1200
1400
1600
1800
2000
2500
3000
3500
4000
1189
5000
7500
10000



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**Short Line** 

In-line Air Compressor

Long Line attaches here

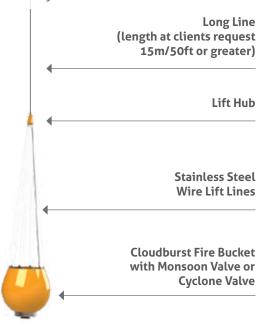
\* Other volumes available on request



**Configuration 2** requires a **Compressor Module**, located inside the aircraft that provides compressed air supply to the **Monsoon Valve**. This module has a corded remote control for crew members to operate the **Cloudburst Fire Bucket**.

It also can be coupled with our **Power Control Module**, which provides an auxiliary power supply to operate the entire system.

Many combinations can be used to accommodate the needs required to operate your **Cloudburst Fire Bucket** system.



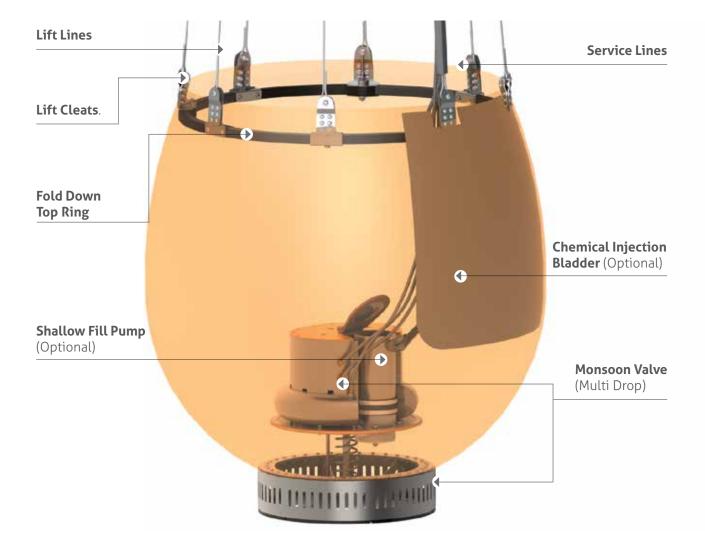
A modern and reliable approach to aerial fire suppression.

## **Cloudburst Features**

The Cloudburst Fire Bucket is a wise investment for military and civilian operations around the world due to its modern features, reliability, and design.

The **Cloudburst Fire Bucket** is made of tough and durable PVC, an industry-recognized super material that is tough and flexible. It is strong, load-bearing, impact-resistant, and capable of withstanding high operating temperatures. This material is also chosen for its strength, excellent UV stabilization, and strong resistance to the growth of algae and fungi.

## **Cloudburst with Monsoon Valve**



Available in either Hard Shell or Soft Shell options

**Please note:** Valve size relates to bucket volume, refer to the table on page 11.

## **Monsoon** Valve

## The Monsoon Valve requires electrical power to operate and open/close.

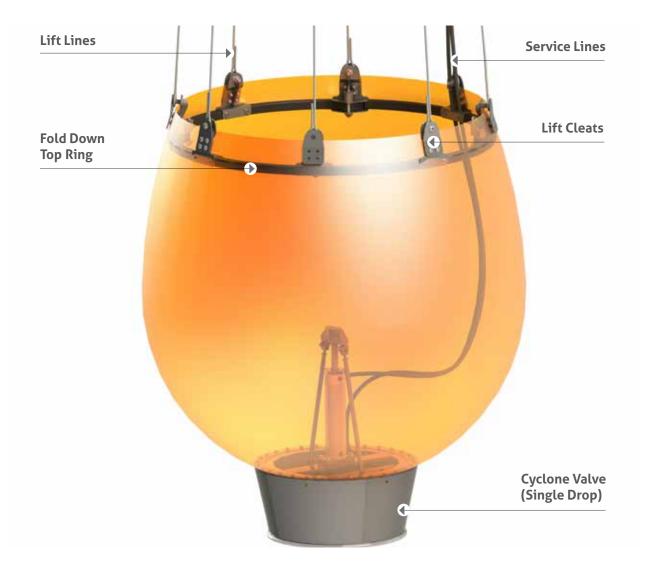
- Multi-drop
- Low maintenance
- User friendly



**Monsoon Valve** 

**Please note:** All Monsoon Valves come with a Swath Plate that can be simply fitted to the underside of the Monsoon Valve to provide a broader drop pattern when required.

## **Cloudburst with Cyclone Valve**



Available in either Hard Shell or Soft Shell options

## **Cyclone Valve**

## The Cyclone Valve is electrically actuated, providing a fast and reliable water release.

- Single drop
- Low maintenance
- User friendly



Cyclone Valve

Cyclone Valves are an alternative option if the multi-drop function is not required or if the aircraft's electrical power output is restricted to less than 10amps.

## Keeping it simple.

Cloudburst <sub>V(</sub> Fire Bucket L Model	Volume Liters	Volume USG	Approx. Drop Flow Rate L/sec (gal/ sec)	Арргок. Bucket Empty Weight kg/lbs	Comp Current amps	SFP Current amps DC	Qty DC SFP	SFP Flow Rate DC L/ sec (G/sec)	SFP Currant amps AC A	SFP Flow Rate L/sec (G/sec)	CIS Current amps DC	CIS Weight
	130	34	62 (16)	22 / 49	7.5 ~	ı		ı		1	3	2kg / 4.5lbs
	200	53	62 (16)	25 / 55	7.5 ~	ı	ı		·	ı	2	2kg / 4.5lbs
	280	74	62 (16)	29 / 64	7.5 ~	ı	ı	I	ı	1	2	2kg / 4.5lbs
	420	111	125 (33)	40 / 88	7.5 ~	ı	I	ı	ı	ı	23	3kg / 6.6lbs
	500	132	125 (33)	41/90	7.5 ~	I	I	I	ı	I	2	3kg / 6.6lbs
	640	168	125 (33)	43/95	7.5 -	I	I	I	ı	I	Ю	3kg / 6.6lbs
	750	197	125 (33)	45 / 99	7.5 ~	I	I	I	ı	I	2	3.5kg / 7.7lbs
	880	232	240 (63)	58 / 128	15 #	50	Ч	25 (6.6)		1	3	4kg / 8.8lbs
CB1000	1000	263	240 (63)	59 / 130	15 #	50	Ч	25 (6.6)	ı	I	2	4kg / 8.8lbs
CB1200	1200	316	240 (63)	60 / 132	15 #	50	-	25 (6.6)	ı	ı	9	5kg / 11lbs
CB1400	1400	368	285 (75)	65 / 143	15 #	50	Ч	25 (6.6)		I	9	5kg / 11lbs
CB1600	1600	421	285 (75)	70 / 154	15 #	50	сı	25 (6.6)	ı	I	9	5kg / 11lbs
CB1800	1800	474	500 (132)	88 / 194	25 0	100	2	50 (13.2)	50	100 (26)	9	6kg / 13/bs
CB2000	2000	526	500 (132)	90 / 198	25 0	100	2	50 (13.2)	50	100 (26)	9	6kg / 13/bs
CB2500	2500	658	500 (132)	110 / 243	25 <b>0</b>	100	2	50 (13.2)	50	100 (26)	6	8kg / 17.6/bs
CB3000	3000	789	500 (132)	120 / 265	25 <b>0</b>	100	2	50 (13.2)	50	100 (26)	6	8kg / 17.6/bs
CB3500	3500	921	700 (185)	125/276	25 <b>0</b>	100	2	50 (13.2)	50	100 (26)	6	10kg / 22lbs
CB4000 4	4000	1053	700 (185)	165 / 276	25 0	100	2	50 (13.2)	50	100 (26)	6	13kg / 28.6lbs
CB4500 4	4500	1189	700 (185)	168/370	25 <b>0</b>	100	2	50 (13.2)	50	100 (26)	6	13kg / 28.6lbs
- 1	5000	1316	700 (185)	171/377	25 <b>0</b>	100	2	50 (13.2)	50	100 (26)	6	13kg / 28.6lbs
CB7500 7	7500	1974	980 (259)	199 / 439	40 +	I	ı	I	50	100 (26)	12	18kg / 39.6lbs
CB10000 1	10000	2632	980 (259)	214/472	40 +	ı	ı	I	50	100 (26)	12	18kg / 39.6lbs

Each **Cloudburst Fire Bucket Model** can have either a Multi Drop Monsoon Value (M) or a Single Drop Cyclone Valve (C). Example: CB130M = Cloudburst Fire Bucket CB130 Multi Drop Monsoon Value CB130C = Cloudburst Fire Bucket CB130 Single Drop Cyclone Valve

©;;< ≀ # ○ +	Excludes Ballast weightPower requirements24-28vdcPower requirements3 phase, 208Weight of Inline Compressor9kg / 20lbsWeight of Inline Compressor11kg / 24lbsWeight of Inline Compressor18kg / 40lbsWeight of Inline Compressor30kg / 66lbsWeight of Inline Compressor30kg / 66lbsWeight per DC pump9kg / 20lbs	24-28vdc 3 phase, 208vac, 400Hz 9kg / 20lbs 11kg / 40lbs 30kg / 66lbs 9kg / 20lbs	Comp   =   Air Compressor either Inline or Compressor Module     amps   =   Electrical Current Draw     SFP   =   Shallow Fill Pump     DC   =   Direct Current     AC   =   Alternating Current     AC   =   Alternating Current     CI   =   Current
	Weight per AC pump	38kg / 83lbs	Please note: Some Valve and Bucket shell combinations can be configured to suit client needs; for example, the CB1400 can have a Valve 660 fitted if required.

## Accessories

#### Optional accessories available for the Cloudburst Fire Bucket range



## **Chemical Injection Options**

A bladder can be attached to the side wall of the **Cloudburst Fire Bucket** or a **Chemical Tank** that can be carried in the aircraft.

Either **Chemical Injection System** can deliver a timed volume of chemical into the bucket of water. Agitation will occur during the water release.

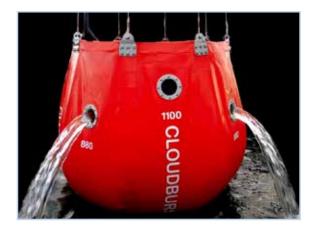


## **Chemical Controller**

The optional **Chemical Controller** ensures the quantity of chemical being injected into each load of water is accurate and consistent.







### **Inline Compressors**

The electrically powered **Inline Compressor** offers a lightweight and compact external load, providing a compressed air supply to the **Cloudburst Fire Bucket.** 

### **Level Limiters**

**Level Limiters** can be installed if required to limit the volume of water carried within the **Cloudburst Fire Bucket**.

Simply remove the plug to allow the excess volume to be discharged from the bucket during the filling process.



Suitable for CB1800 - CB5000

Suitable for CB130 - CB1600

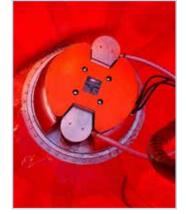
#### **DC Pump**



**AC Pump** 



**DC Pump** 



AC Pump



## Shallow Fill Pump DC

Developed to be both effective and easy to use, the 28VDC, 50 amp **Shallow Fill Pump** is built into the Monsoon Valve, providing mechanical protection when the bucket is manoeuvred into tight spaces for filling. With a filling rate in excess of 25 liters (6.6 gallons) per second per pump and a minimum filling depth required of 0.16 meters (6.3 inches) the **Shallow Fill Pump** is a vital tool when available water sources are limited.

## Shallow Fill Pump AC

**Shallow Fill Pump** AC, a 3 phase 208VAC, 50 amp, 400HZ, 10hp pump at a flow rate of 100 liters (26 gallons) per second. This assembly has been designed to bolt onto the shell of the **Cloudburst Fire Bucket**, and is suitable for buckets of 2500 liters (658 gallon) or larger with either a **Monsoon** or **Cyclone Valve** fitted.



### Power Distribution Module

Powered by the aircraft electrical power, the **Power Distribution Module** is a fully integrated system giving you control of all systems on your **Cloudburst Fire Bucket** including valve control, **Chemical Injection** timing and **Shallow Fill Pump** control.

## **Compressor Module**

The **Compressor Module** supplies the **Monsoon** or **Cyclone Valve** with the compressed air supply to operate.



Model	Voltage DC	Air Flow at zero psi feet³/min	Maximum current draw (amps)	Weight kg / lbs
CM250-12-1	12	1	6	9.6 / 21
CM250-24-1	24	1	6	9.6 / 21
CM450-24-1	24	2.2	13	13 / 29
CM450-24-2	24	4.4	26	18 / 40
CM450-24-3	24	6.6	39	26 / 57

### Power and Control Module

This module has been designed to provide an auxiliary power supply and control to operate the **Cloudburst Fire Bucket** and associated accessories without the need to draw electrical power from the aircraft's electrical system.

Model	Voltage DC	Amp Hours	Weight kg / lbs
PCM-6	24	6	9.6 / 21
PCM-18	24	18	18 / 40
PCM-36	24	36	31/68
PCM-80	24	80	68 / 150
PCM-120	24	120	80 / 176
PCM-165	24	165	122 / 296
PCM-270	24	270	184 / 405



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### Compressor, Power and Control Module

This module is very similar to the Power Control Module. It also contains an air compressor.

Model	Voltage DC	Amp Hours	Air Flow at zero psi feet³/min	Maximum current draw (amps)	Weight kg / lbs
CPCM-250-24-22	24	22	1	6	40 / 88
CPCM-250-24-36	24	36	1	6	51/112
CPCM-450-24-80	24	80	2.2	13	71/157
CPCM-450-24-2-80	24	80	4.4	26	80 / 176
CPCM-450-24-120	24	120	2.2	13	86 / 190
CPCM-450-24-2-120	24	120	4.4	26	94 / 207
CPCM-450-24-165	24	165	2.2	13	126 / 278
CPCM-450-24-2-165	24	165	4.4	26	134 / 295
CPCM-450-24-270	24	270	2.2	13	182 / 401
CPCM-450-24-2-270	24	270	4.4	26	192 / 423

### Carry / Stowage Bag

Compact and tidy, all **Cloudburst Fire Buckets** up to and including the CB2000 come complete with a carry bag.

## Cloudburst Dam

#### Strong and durable water storage.

Designed for water storage for fire fighting, the **Cloudburst Dam** has many other uses to contain liquids.

**Cloudburst Dams** have a foam-filled top ring that will float on the contained liquid, thereby erecting itself as it fills.

#### **Key Benefits:**

- Available in specific fabrics best suited for application
- HF-welded construction for superior strength
- Light weight and compact for transportation
- Easy to clean and re-use
- Repairable when full

### Capacity

	Liters	1,200L	2,200L	5,000L	10,000L
	Gallons	316G	580G	1,320G	2,640G
Diameter (mm)	(Y)	1600	2300	2900	4000
Height (mm)	(Z)	850	900	1150	1400
Top opening (mm)	(X)	1000	1125	1400	2100

	Liters	15,000L	18,000L	25,000L	40,000L
	Gallons	3,960G	4,755G	6,600G	10,565G
Diameter (mm)	(Y)	5200	5300	5400	6200
Height (mm)	(Z)	1300	1300	1300	2000
Top opening (mm)	(X)	2900	3400	3400	3500

Other sizes manufactured to customer's requirements

### Product

Material

Water

Polyester reinforced PVC 1250g/m<sup>2</sup>

## Standard Equipment

1 x Skin Fitting and Ball Valve
Ground Sheet
Carry Bag

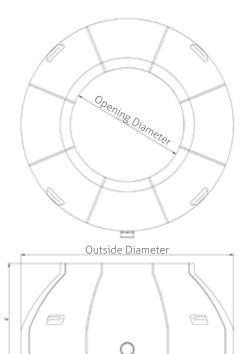
## **Optional Additional Equipment**

Skin fittings - 38mm - (1 1/2"), 50mm - (2"), 75mm - (3"), 100mm - (4") Ball valves - 38mm - (1 1/2"), 50mm - (2"), 75mm - (3"), 100mm - (4")

Liters	1200	2200	5000	10000	15000	18000	25000	40000	
US Gallons	316	580	1320	2640	3960	4755	6600	10565	
	1600	2100	2900	4000	5200	5300	5400	6200	
	950	1000	1250	1500	1400	1400	1400	2100	
	1000	1125	1400	2100	2900	3400	3400	3500	
	22	31	46	57	71	89	101	116	
Carry Bag Size									
	750	1000	1200	1500	1650	1700	2100	2350	
	600	700	950	1150	1150	1150	1150	1150	
	400	450	500	650	750	750	750	750	
Shipping Crate Size									
	800	1050	1250	1550	1700	1750	2150	2400	
	650	750	1000	1200	1200	1200	1200	1200	
	550	600	650	800	900	900	900	900	
	75	90	101	116	141	158	179	194	
		US Gallons   316     16001   9501     10001   201     20   201     10001   201     20   10001 </td <td>US Gallons   316   580     16000   21000     9500   10001     1000   2120     1000   2120     20   31000     1000   10000     1000   10001     1000   10001     1000   4000   4001     1000   4000   10501     1000   5000   5000</td> <td>US Gallons     316     580     1320       1600     2100     2900       950     1000     1250       1000     1125     1400       22     31     46       750     1000     1200       600     700     950       400     450     500       800     1050     1250       650     750     1000       550     600     650</td> <td>US Gallons31658013202640160021002900400095010001250150010001125140021002231465710001000120015001000700950115040045050065010001050125015001000550600550800</td> <td>US Gallons3165801320264039601600210029004000520095010001250150014001000112514002100290022314657717501000120015001650600700950115011504004505006507508001050125015001700650750100012001200550600650800900</td> <td>US Gallons31658013202640396047551600210029004000520053009501000125015001400140010001125140021002900340022314657718910001200120015001650170010001200120015001650170010005005006507501500100012501550170015001500100012501550170017501000550600500500900</td> <td>US Gallons31658013202640396047556600160021002900400052005300540095010001250150014001400140010001125140021002900340034002231465771891017501000120015001650170021006007009501150115011501150400450500650750750750800105012501550170012001200650750100012001200120012001200550600650800900900900</td>	US Gallons   316   580     16000   21000     9500   10001     1000   2120     1000   2120     20   31000     1000   10000     1000   10001     1000   10001     1000   4000   4001     1000   4000   10501     1000   5000   5000	US Gallons     316     580     1320       1600     2100     2900       950     1000     1250       1000     1125     1400       22     31     46       750     1000     1200       600     700     950       400     450     500       800     1050     1250       650     750     1000       550     600     650	US Gallons31658013202640160021002900400095010001250150010001125140021002231465710001000120015001000700950115040045050065010001050125015001000550600550800	US Gallons3165801320264039601600210029004000520095010001250150014001000112514002100290022314657717501000120015001650600700950115011504004505006507508001050125015001700650750100012001200550600650800900	US Gallons31658013202640396047551600210029004000520053009501000125015001400140010001125140021002900340022314657718910001200120015001650170010001200120015001650170010005005006507501500100012501550170015001500100012501550170017501000550600500500900	US Gallons31658013202640396047556600160021002900400052005300540095010001250150014001400140010001125140021002900340034002231465771891017501000120015001650170021006007009501150115011501150400450500650750750750800105012501550170012001200650750100012001200120012001200550600650800900900900	

Note: These dimensions and weights are guide lines only and may vary.





Please note: Additional sizes and material choices are available upon request.

Achieve a fast and accurate water drop.



The 21st century features of the **Cloudburst Fire Bucket** provide rapid filling, fast valve operation, low maintenance and ease of use, making the **Cloudburst Fire Bucket** a wise investment.



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# For all your helicopter equipment needs, contact us today!



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