TEMPEST

Blizzard^G4

Outdoor Projector Enclosures 5-15K

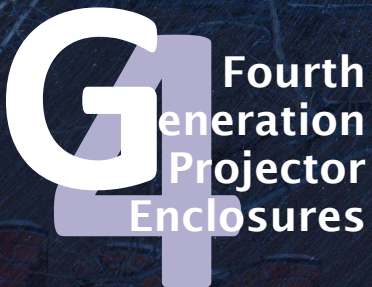**G4 Fourth Generation Projector Enclosures**

Blizzard
Outdoor Projector Enclosures

Blizzard is the world's most popular outdoor projector enclosure for permanent installation in any climate, for video mapping, outdoor attractions, advertising and outdoor movies.

Blizzard comes in three standard sizes, for projectors between about 5,000 and 15,000 ANSI lumens.

Now Blizzard comes with all the new features you've asked us for:

· *Optional Projector Tray slides out either side for easy installation and service access*

· *Tabletop or ceiling projector mount*

· *Rear door opens for lamp access*

· *Stackable*

· *Loads of rigging accessories*

· *Optional Ethernet communications*

All Blizzard models feature Tempest's patented Digital Enclosure Control system (DEC4™), now available with optional remote monitoring over your TCP/IP network.

Blizzard models come in three sizes, and three configurations. to suit any outdoor projection application:
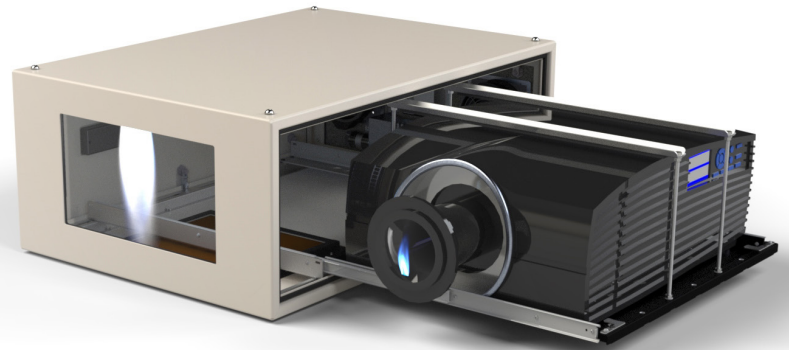
Landscape

The standard configuration — projector may be configured tabletop or ceiling style, with your choice of fixed or sliding projector mount.
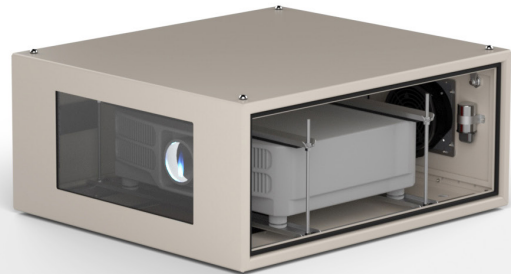
Portrait

Blizzard portrait versions are available to special order in all sizes. Specify projector type when ordering.

Ultra-Short-Throw

Blizzard is ready for the UST revolution! Now you don't need to own the plot across the street to project on the front of your building! UST models may be configured to project either up or down, for ground or roof-level installation. Specify projector and lens type when ordering.

Blizzard 52.150.LS with projector slide. Use 52.150 models for most projectors 12-15,000 ANSI lumens.

Blizzard 52.100.LF Landscape, with fixed projector mount. Suitable for most projectors 8-10,000 ANSI lumens.

Blizzard 52.100.P Portrait enclosure for most projectors 8-10,000 ANSI lumens that allow portrait orientation.

Blizzard 52.100.U Enclosure for most projectors 8-10,000 ANSI lumens fitted with Ultra-Short-Throw lenses.
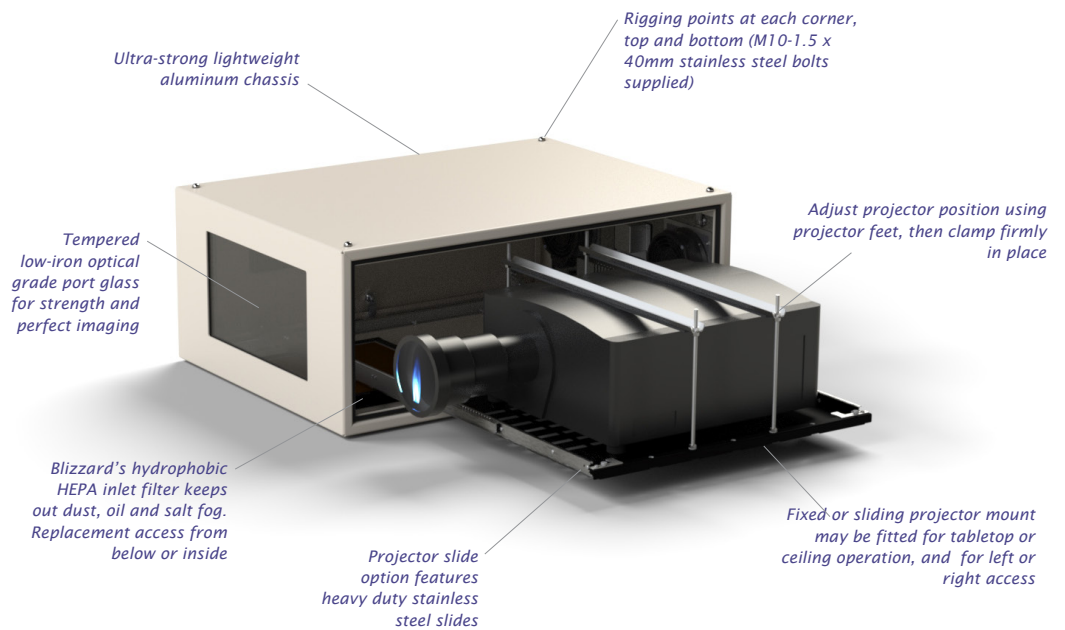
Blizzard UST enclosures may be installed to project either up or down.

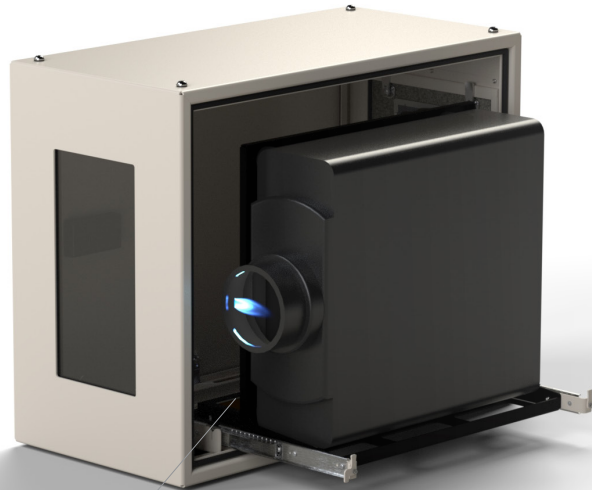TEMPEST

Blizzard
Outdoor Projector Enclosures

Landscape

Rigging points at each corner, top and bottom (M10-1.5 x 40mm stainless steel bolts supplied)

Ultra-strong lightweight aluminum chassis

Tempered low-iron optical grade port glass for strength and perfect imaging

Adjust projector position using projector feet, then clamp firmly in place

Blizzard's hydrophobic HEPA inlet filter keeps out dust, oil and salt fog. Replacement access from below or inside

Projector slide option features heavy duty stainless steel slides

Fixed or sliding projector mount may be fitted for tabletop or ceiling operation, and for left or right access

DEC4 Enclosure Control with patented Goldilocks™ OS and remote monitoring option

Removable side panels with security key locks

Lockable back door for easy relamping access without moving the projector

Powerful AC exhaust fan(s) run when the controller detects the projector lamp is on, or if internal temperatures rise during the day.

Dual IEC C13 power outlets for projector and aux equipment, protected by DEC overtemp relay

DEC4™ User Interface, for customized setup and system monitoring. May be monitored remotely with optional comms card

The Exhaust Cowl's integral insect screen keeps rain - and bugs - away from your equipment. For additional protection against saline air and other pollutants, specify Blizzard's Positive Pressure option. (52.PP)

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Blizzard
Outdoor Projector Enclosures

Portrait

Blizzard Portrait enclosures are customized for the intended projector mount, so we need to know the projector you're using when you order.

Not all projectors may be used in portrait mode. Some may be used in portrait mode but only in one orientation — check with your projector manufacturer before ordering.

Blizzard Portrait enclosures incorporate a customized mounting frame for the desired projector.

Projector attaches to the mounting frame with screws provided.

Use projector feet to adjust projector angle, then tighten mounting screws to lock.

Ultra Short Throw

Blizzard UST outdoor enclosures allow you to paint a wall with video without having to own the block across the street!

UST enclosures are typically wider than standard landscape enclosures, to allow for the extreme width of the projection beam without clipping.

Blizzard UST enclosures may be configured to mount above the image (projecting down) or below it (projecting up).

Please note that, due to the differing characteristics of available UST optical systems, all UST enclosure orders are treated as semi-custom. Tempest will collaborate with the projector manufacturer in each case to arrive at the optimal solution.

There are several different optical solutions competing for your ultra-short-throw business. Tempest works with all major projector manufacturers to create effective solutions that work for you. This one takes the innovative Epson periscopic lens.

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Blizzard
Outdoor Projector Enclosures

All Blizzards come with four M10 threaded sockets — one at each corner — top and bottom. See the CAD drawings and 3D CAD blocks at Tempest.biz for precise dimensional data.

Stainless steel bolts are provided for attachment to any suitable support structure.

Tempest recommends only the use of stainless steel hardware for installing enclosures outdoors.

The following rigging options are available for any Blizzard enclosure:

Blizzard Vertical Pole Hanger Kit

Hang Blizzard safely on a vertical pole 50mm [2"] OD. Allows up to 30˚ tilt, 5˚ roll and unlimited pan adjustment. *Note: Not recommended for Blizzard 52.150 models.*

Blizzard Horizontal Pole or Truss Kit

Hang Blizzard safely on any truss or horizontal pipe with OD 50mm [2"]. The Truss kit allows you to:

· Tilt the enclosure by pivoting on the supplied truss clamps, +/- 30˚

· Pan the enclosure up to 45˚ left or right

· Roll the enclosure +/- 5˚

Stacking Kit

Stack two or more Blizzard enclosures of the same type using this stacking kit.

Male and female parts attach to the threaded corner holes, and are simply joined together using a stainless steel clevis pin.

See also Swivel Stacking Kit, next page)
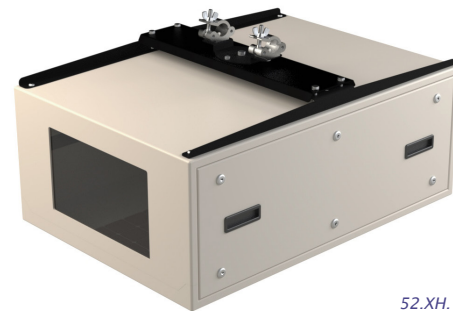
Drop Arms

Use with a Stacking Kit to hang a lower Blizzard enclosure at an angle up to 60 degrees down.

Max Angles:

Blizzard 52.050   60˚

Blizzard 52.100   51˚

Blizzard 52.150   41˚

Blizzard 52.100 Portrait with 52.XV.100P Vertical Pole Hanger Kit

Blizzard 52.150 Landscape with 52.XH.150L Horizontal Pole/Truss Hanger Kit

A pair of Blizzard 52.150 Landscape enclosures with 52.SK Stacking Kit. The kit maintains the required 75mm airflow gap between the two enclosures

...just add the 52.DA Drop Arms Kit to angle the lower enclosure

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Blizzard
Outdoor Projector Enclosures

Cyclovator

Set a projection angle up to 60° up or down. Perfect for rooftops when shooting down or at ground level when projecting up at a tall building. Stack up to two Blizzards on each Cyclovator.

Requires Unistrut Kit 52.UR.xxx.

Unistrut Kit

Easy attachment to any structure using these two Unistrut rails. Simply use industry standard channel nuts to bolt to your structure, without worrying about precise hole locations.

Unistruts may be mounted bottom (shown here with Cyclovator) or top.

Swivel Stacking Kit

Stack two Blizzard enclosures (must be the same model), and angle them up to 40 degrees apart (20° either side of center) — great for short-throw edge blending jobs.

Stainless steel stacking kits attach to M10 rigging points, and locking bolts are provided to secure pan angle when aligned.

Rigging Options

A pair of Blizzard 52.150 Landscape enclosures mounted on a Cyclovator.

Note that the bottom Blizzard requires a 52.UR.150 Unistrut kit to mount to the Cyclovator, and for angles more than about 35 degrees an Inlet Cowl (51.IC.15 here) keeps rain off the inlet filter.

52.SH.xxxx Sun Shade attaches easily to the Blizzard's top rigging points. Note that the xxxx matches the enclosure part number, eg 52.SH.100L for the Blizzard 52.100 landscape enclosures shown here.

Swivel Kits work with either Landscape or Portrait enclosures, and come in three sizes, for .050, .100, and .150 Blizzard models.

Climate Options

Sun Shade
(52.SH.xxxx)

Pictured above, this reflective aluminum panel mounts easily on the top of any Blizzard enclosure to provide extra daytime protection in hot, sunny climates. The cover not only deflects sunlight, but also provides a 75mm air gap between the shade and the enclosure top, promoting convective air movement. Use in conjunction with 52.TI thermal insulation in sunny areas with daytime temperatures frequently above 40°C [104°F].

Thermal Insulation Kit
(52.TI — factory fitted)

The thermal insulation kit adds 25mm of thermal insulation all around the inside of the enclosure, conserving heat and reducing energy costs in cold climates, and moderating daytime temperatures in hot weather.
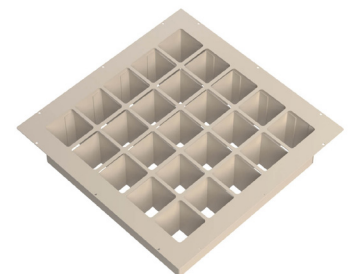
Positive Pressure and Salt Air
(52.PP - factory fitted)

We do a lot of cruise ship jobs, as well as beach resorts and attractions where salt air can be a real problem. Now all Tempest G4 outdoor enclosures can be supplied with a Constant Positive Pressure setting that runs the enclosure fan(s) all the time at low power, maintaining just enough positive pressure to prevent salt or other pollutants sneaking in the back door when the projector is not running.

Desert Filter Baffle

(51.DFB.xx)

Wind-blown dust and sand can rip a filter apart in no time in a bad dust storm — so slow it down with this handy accessory.

The Desert Filter Baffle replaces the filter clamp under the enclosure body, and requires 100mm (4") clearance plus 75mm (3") airflow clearance below the enclosure.

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Blizzard
Outdoor Projector Enclosures

Goldilocks™

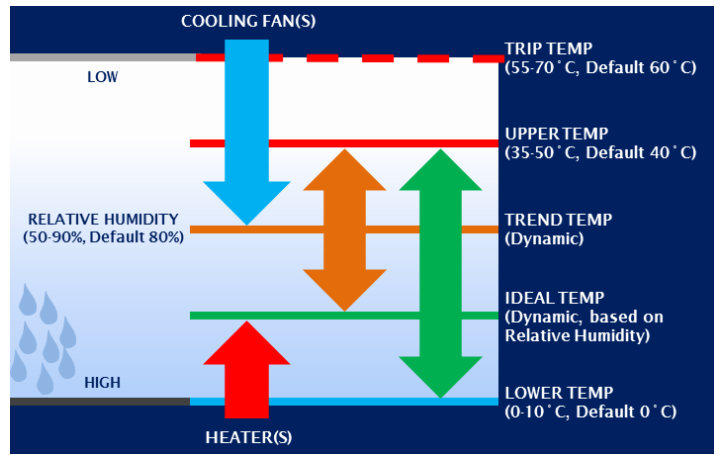How do we keep projectors from roasting when it's 50°C and there's no shade?

And prevent condensation from destroying your projector overnight?

Tempest's unique Goldilocks™ Operating System (patents pending) brings enclosure control to a new level.

Goldilocks keeps the air temperature inside your enclosure just right, removing heat from the projector when the lamp is on or when the enclosure is heated by the sun. We're changing the air about every second.

Goldilocks uses a heater to maintain a minimum temperature in cold climates.

And Goldilocks tracks temperature and humidity 24/7, keep-

ing relative humidity inside your enclosure just right by using heaters to raise the air temperature when needed, adapting constantly to prevent deadly condensation.

Data Logging

Also new with G4, Goldilocks logs all system events for a week, providing invaluable insights in the event of a field service issue. Data logs will be recorded longer term in the G4 System Manager (see below) and will be available locally via USB or remotely over a network or the internet.

Remote Monitoring

It's important to understand that most Blizzard installations are running on factory default settings and are not connected to any kind of network. In many cases that's just fine, but in larger systems or mission-critical applications a remote monitoring sysyem is a lifesaver.

Blizzard reports everything it knows on the user interface display on the back door. Now you can get the same information remotely, in several different ways:
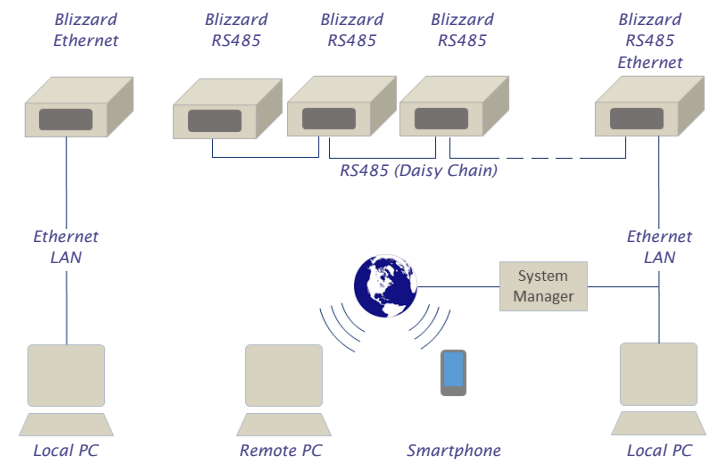
TCP/IP Direct

Plug in an Ethernet bridge to your Blizzard, and now you can find out what's going on in the enclosure. Temperature, humidity, line voltage, current, projector, fan and heater status are just some of the data you can monitor using this feature.

Use Tempest's prepackaged front end, write your own, or integrate with many popular projector control protocols.

RS485 to TCP/IP

For larger systems we offer a simple RS485/Ethernet adapter so you can daisy-chain between groups of enclosures, bridging to Ethernet at one or more enclosure locations. Either way, you get all the information we know about back in the control room.

Web-based Monitoring

With the addition of a Tempest G4 System Manager (coming soon), the system now serves up a web page that can be monitored anywhere.

With the G4 System Manager, Tempest will offer a real-time system monitoring service, alerting you by email if anything happens to your system.

And on your Smartphone!

Not cool enough for you? System Manager will also feature a smartphone ap, so you can stay connected to your Tempest enclosures anytime, anywhere.

For more on DEC4, Goldilocks and remote monitoring, download the Blizzard User Manual from www.tempest.biz

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52 . ___ . __ . __          example: 52.100.LF.IN
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Model #
(eg: 52.100)

Format
L Landscape
P Portrait
U UST[2]

Projector Mount
F Fixed
S Slide (landscape and portrait only)

Electrical Standard
US 100-120V, NEMA standard
North America, Japan
IN 230V, CE Standard
International

Model	Orientation	Dimensions	(lwh)	Weight	Projector Max (lwh)[3]	Shipping Dimensions (lwh)/Weight	
52.050.L	Landscape	29x28x13.5in	737x711x345	59lb/27kg	24x22.5x9in 610x572x229mm 800 Watts	36x36x24in/910x910x610	77lb/35kg
52.050.P[1]	Portrait	29x17x27in	737x432x686	64lb/29kg		36x36x24in/910x910x610	81lb/37kg
52.100.U[2]	Ultra Short Throw	Custom - consult factory				36x36x24in/910x910x610	81lb/37kg
52.100.L	Landscape	34x30x14.5in	867x762x368	70lb/32kg	28x24.5x10in 711x622x254mm 1,250 Watts	36x36x24in/910x910x610	88lb/400kg
52.100.P[1]	Portrait	34x17x27in	867x432x686	75lb/34kg		36x36x24in/910x910x610	92lb/42kg
52.100.U[2]	Ultra Short Throw	Custom - consult factory				36x36x24in/910x910x610	92lb/42kg
52.150.L	Landscape	42x30x16.5in	1067x762x419	92lb/42kg	35x24.5x12in 890x622x305 1,800W	52x34x20in/1300x840x610	110lb/50kg
52.150.P[1]	Portrait	42x19x30in	1067x483x762	99lb/45kg		52x34x20in/1300x840x610	117lb/53kg
52.100.U[2]	Ultra Short Throw	Custom - consult factory				52x34x20in/1300x840x610	117lb/53kg

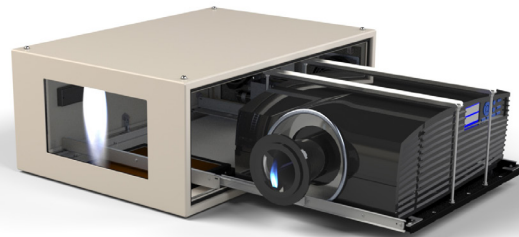[1] Please specify projector and lens make and model when ordering portrait enclosures

[2] All UST versions are custom or semi-custom. Please consult factory for details

[3] Remember to include lens, plus connectors and cable bend radius in projector dimensions

All Blizzard Portrait and UST products are built to order. Please consult factory for lead times.

All sales are subject to Tempest Lighting, Inc. Standard Terms and Conditions of Sale, available for download at www.tempest.biz.

All Schedule B Export Code: 9405.99.0000

CAD drawings, CAD blocks and user manuals at www.tempest.biz

Options and Accessories

Options

Item #	For Model:	Description
52.TI	Any Blizzard	Thermal Insulation Kit, recommended for hot or cold climates
52.PP	Any Blizzard	Blizzard Positive Pressure Option
51.EN	Any Blizzard	Ethernet Communications
55.AC	Any Blizzard	AC Assist Option - Consult Factory
0000.CL	Any Blizzard	Custom Color - specify black, white or any RAL #, plus desired gloss %

Accessories

Item #	For Model:	Description
55.C2	Blizzard 150	Tempest Cyclovator Tilt Kit
52.UR.xxx	'xxx' = model #	Unistrut Mounting Rails (required with 55.C2)
52.XH.xxxL	'xxx' = model #	XYZ Hanger Kit for horizontal pole/Truss, Landscape Blizzard
52.XH.xxxP	'xxx' = model #	XYZ Hanger Kit for horizontal pole/Truss, Portrait Blizzard
52.XV.xxxL	'xxx' = 050 or 100	XYZ Hanger Kit for vertical pole, Landscape Blizzard 050 or 100 only
52.XV.xxxP	'xxx' = 050 or 100	XYZ Hanger Kit for vertical pole, Portrait Blizzard 050 or 100 only
52.SK	Any Blizzard	Blizzard Stacking Kit
52.DA	Any Blizzard	Blizzard Drop Arms Kit (requires Stacking Kit)
52.SH.xxxL	Landscape 050-150	Blizzard Sun Shade Kit, Landscape
52.SH.xxxP	Portrait 050-150	Blizzard Sun Shade Kit, Portrait
52.SS.xxx	'xxx' = model #	Blizzard Swivel Stacking Kit (Landscape or Portrait)
51.IC.08	Portrait, UST 050, 100	Inlet Cowl (Order 2 per enclosure)
51.IC.11	Portrait , UST 150	Inlet Cowl (Order 2 per enclosure)
51.IC.11	Landscape 050, 100	Inlet Cowl (Order 1 per enclosure)
51.IC.11	Landscape 150	Inlet Cowl (Order 1 per enclosure)
51.DFB.08	Portrait, UST 050, 100	Desert Filter Baffle (Order 2 per enclosure)
51.DFB.11	Portrait, UST 150	Desert Filter Baffle (Order 2 per enclosure)
51.DFB.11	Landscape 050, 100	Desert Filter Baffle (Order 1 per enclosure)
51.DFB.15	Landscape 150	Desert Filter Baffle (Order 1 per enclosure)
51.HF.08	Portrait, UST 050, 100	Replacement Salt Fog Inlet Filter (Order 2 per enclosure)
51.HF.11	Portrait, UST 150	Replacement Salt Fog Inlet Filter (Order 2 per enclosure)
51.HF.11	Landscape 050, 100	Replacement Salt Fog Inlet Filter (Order 1 per enclosure)
51.HF.15	Landscape 150	Replacement Salt Fog Inlet Filter (Order 1 per enclosure)

Custom Colors

All the enclosures in this brochure are shown in our popular standard light bronze finish.

White, Black or any RAL color are available to special order.

CAD drawings, CAD blocks and user manuals at www.tempest.biz

Blizzard Configurator

Please complete one sheet for each Blizzard type required and email to us at info@tempest.biz

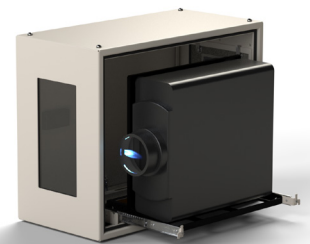|	
Name	
Company	
Email	
Phone	
Project Name & Location	
Projector type	
Blizzard Model	52. _____
Quantity	
Destination Country	
Install Date	
Type	Landscape ☐ Portrait ☐ Ultra Short Throw ☐
Projector Mount	Slide ☐ Fixed ☐
Projector Mount	Feet Down ☐ Feet Up ☐

Options & Accessories

Thermal Insulation	Yes ☐ No ☐
Inlet Cowl	Yes, Qty _____ No ☐
Desert Filter Baffle	Yes, Qty _____ No ☐
Positive Pressure	Yes, Qty _____ No ☐
Sun Shade	Yes, Qty _____ No ☐
Cyclovator	Yes, Qty _____ No ☐
Unistrut Kit	Yes, Qty _____ No ☐
Stacking Kit	Yes, Qty _____ No ☐
Drop Arms Kit *(requires Stacking Kit)*	Yes, Qty _____ No ☐
Swivel Stacking Kit	Yes, Qty _____ No ☐
XYZ Kit, Horizontal	Yes, Qty _____ No ☐
XYZ Kit, Vertical	Yes, Qty _____ No ☐
Ethernet Bridge	Yes, Qty _____ No ☐

Spare Inlet Filter	Yes, Qty _____ No ☐
Color	Standard, Light Bronze ☐
	Custom, RAL # _____ Gloss Level _____%

Custom Requests:

Factory Use Only:	
SO Number	
Date	

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