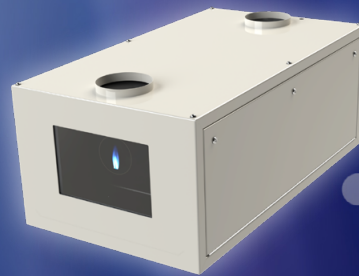




TEMPEST

Tacit

Hush
Projector
Enclosures
5-50K



Tacit Hush Projector Enclosures

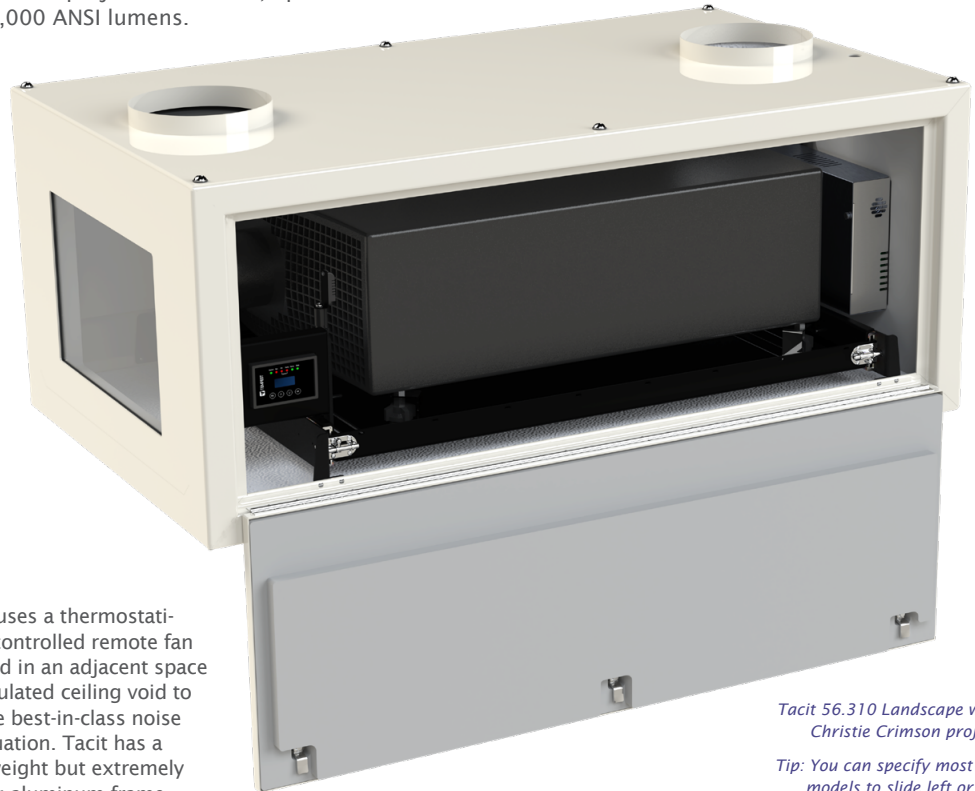
Tempest is the world's leading manufacturer of large format indoor projector enclosures for noise attenuation in presentation suites, digital cinema, live theatre and concert venues – any noise-sensitive indoor space. Larger Tacit models are projector-specific for projectors above 20K lumens, and have been tested and approved for each of the projectors covered, up to 50,000 ANSI lumens.

New:

All Tacit enclosures come with AR-coated optical grade port glass with >98% visible light transmission.

And:

All Tacit Landscape enclosures come with DCI-compliant angled port glass.



Tacit 56.310 Landscape with a Christie Crimson projector

Tip: You can specify most Tacit models to slide left or right

Tacit uses a thermostatically controlled remote fan located in an adjacent space or insulated ceiling void to assure best-in-class noise attenuation. Tacit has a lightweight but extremely strong aluminum frame, with threaded holes top and bottom for easy installation.

Tacit offers excellent projector access, with full-length lockable side access doors, and a projector slide that may be ordered for right or left access on all landscape and portrait models.

Standard colors: White (RAL 9003 semi-gloss) or black. Other colors to order.

Tacit is equipped with Tempest's patented DEC4 Control, featuring a comprehensive display and remote monitoring options.

Portrait and Ultra-Short-Throw versions are available to special order.

Why so Quiet?

There are several parts to the puzzle:

- First, Tacit enclosures are airtight boxes with excellent seals, which do much of the work.
- Second, we line Tacit enclosures with two layers of high performance melamine sound insulation foam — rated incidentally to the highest fire safety standards.
- Third, we put the exhaust fan someplace else. As a rule of thumb, you need to blow through an enclosure about double the amount of air being handled by the projector itself.

That means forced cooling, and that means noise. The Tacit exhaust fan is located at the end of a duct (by others), which may be in an insulated ceiling space, an adjoining room or an outside wall.

The exhaust fan may also feed into the building air return, though we don't recommend feeding air to the enclosure inlets from the building air supply. It should be brought in at moderate temperature from a room or ceiling void.

This combination achieves excellent attenuation in the audience space, which is our sole aim.

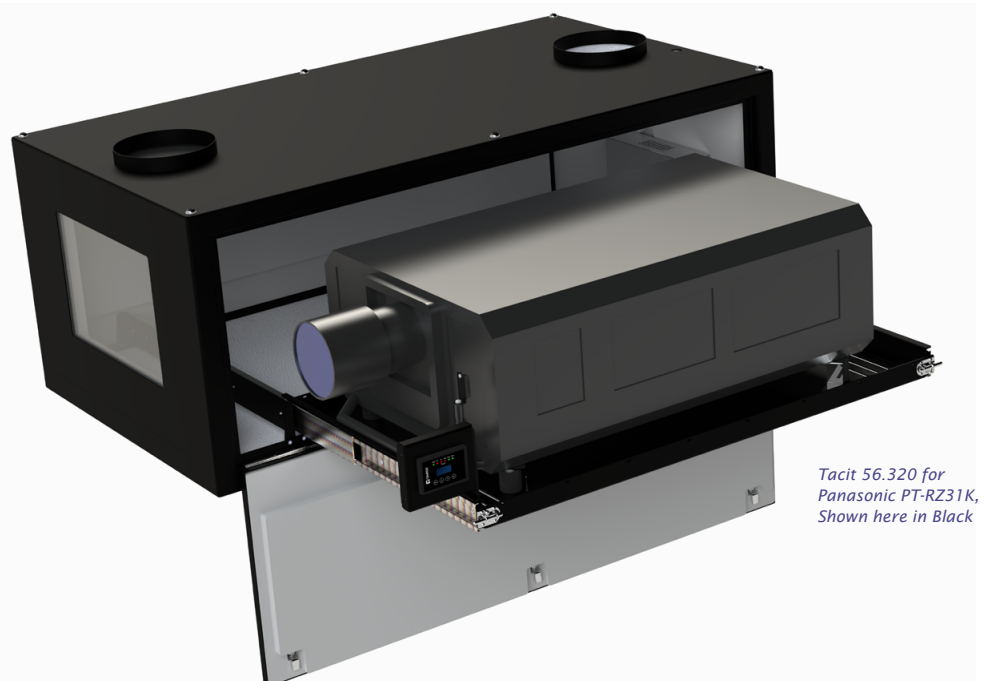
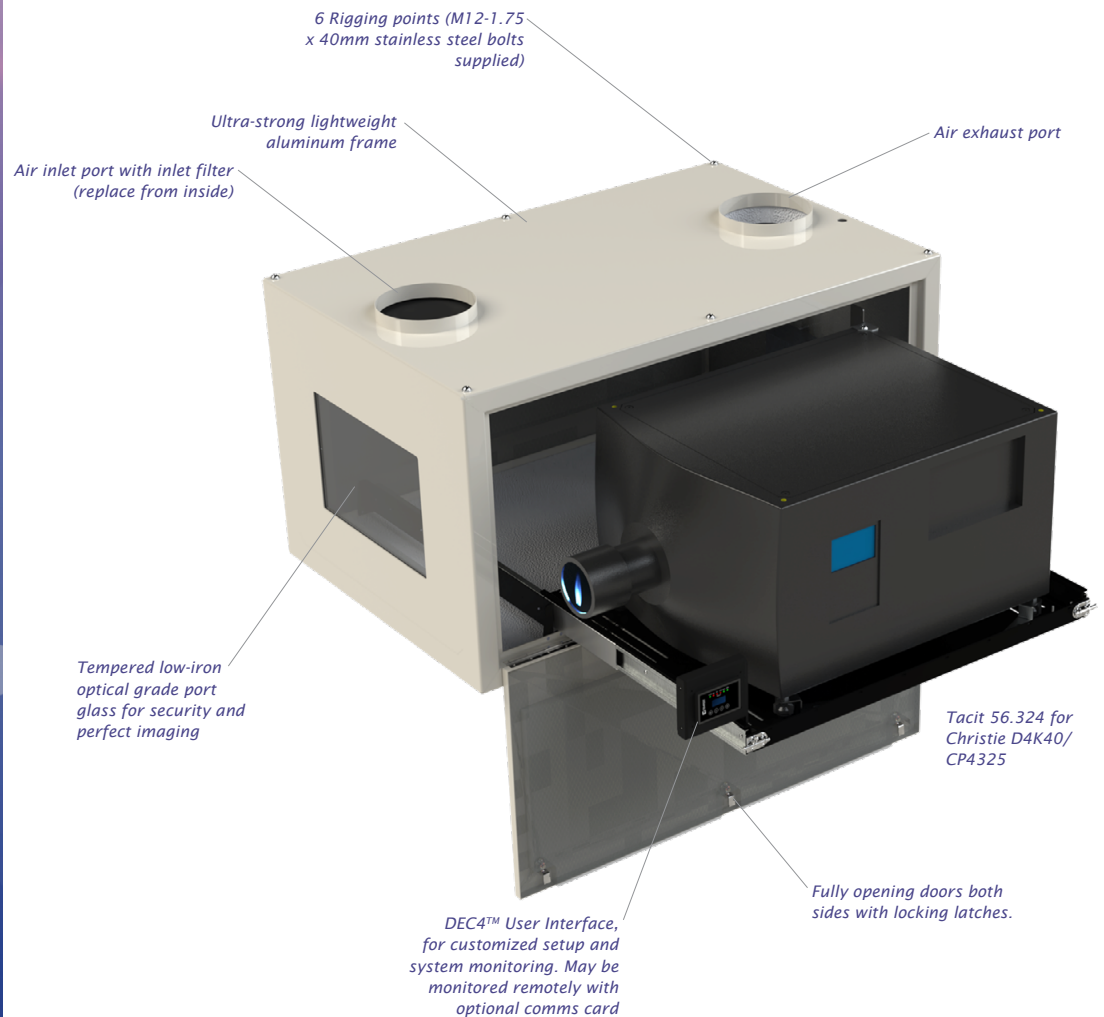
Now Tempest Tacit enclosures monitor air temperature where it matters — right next to the projector air inlet. You can set a target air inlet temperature limit, and Tacit's variable speed remote fan will blow just hard enough to keep it there.

You told us that our user interface was great, but that it could be distracting or hard to reach on the outside. So now it's right where you need it, next to the projector.



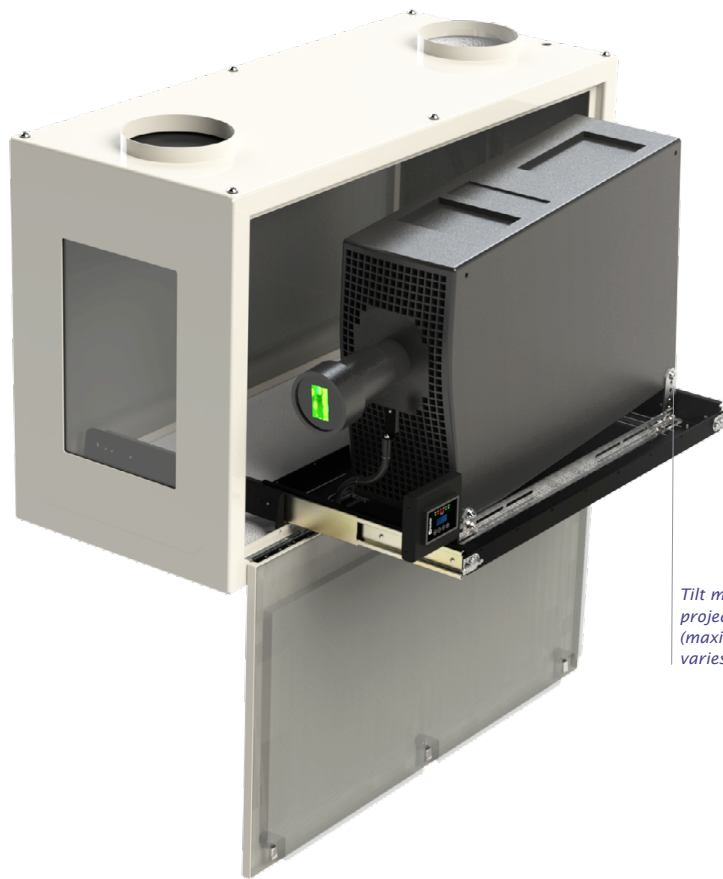
Tacit Hush Projector Enclosures

Landscape



Tacit

Hush
Projector
Enclosures



Portrait

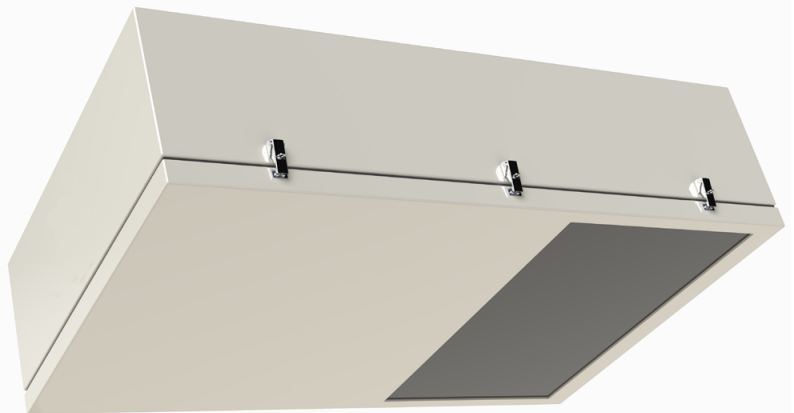
Like all Tacit models, each Tacit portrait enclosure is customized for the intended projector, so we need to know the projector you're using when you order.

Not all projectors may be used in portrait mode — check with your projector manufacturer before ordering.

Some projectors may be used in portrait mode but only in one orientation — either base left or base right (picture here shows a Christie Crimson installed base left).

Tilt mechanism allows projector tilt adjustment (maximum tilt angle varies by projector).

Ultra Short Throw



Tacit UST enclosures allow you to paint the whole wall from just above or below. UST enclosures are wider than standard landscape enclosures, to allow for the extreme width of the projection beam without clipping.

Tacit UST enclosures may be configured to mount above the image (projecting down) or below it (projecting up). Due to the wide variety of UST lens solutions on the market, Tacit UST enclosures are specially

built for your project: Contact Tempest and talk to us about your next UST adventure!

Tacit

Hush
Projector
Enclosures



Tacit Remote Blower Kit

51.RFA.220 (Tacit 050-150)

51.RFA.270 (Tacit 210 and up)

Tacit's powerful remote blower must be located in an adjoining space to the Tacit enclosure, out of audience earshot. Connection to the enclosure is via one 2-conductor power cable (48Vdc, 120W), and one twisted pair for speed control and status feedback — a CAT5 cable is fine. The cable may be pulled back to the enclosure through the exhaust duct if desired.

Mount the blower kit either in a convenient space in free air, or in the side of a building return HVAC duct.

Fan Speed Control

Tacit uses a powerful variable-speed blower in a remote location to keep the projector at optimum operating temperature.

The remote blower will run at the minimum speed required to maintain the target projector inlet temperature, keeping fan noise to a minimum and enabling virtually infinite fan life.

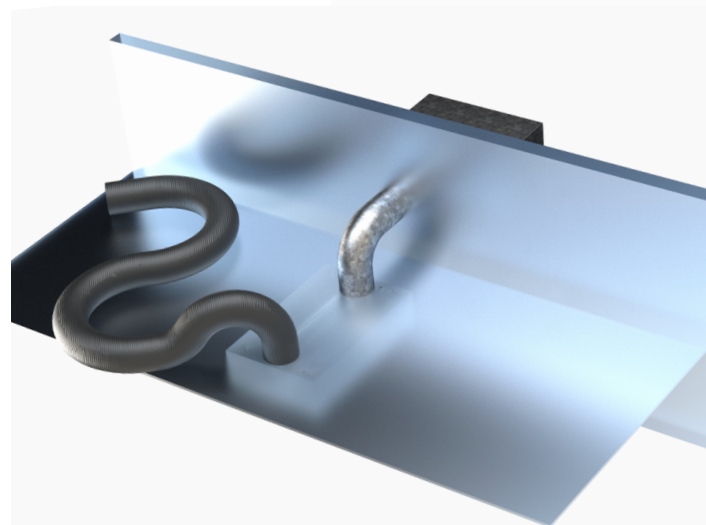
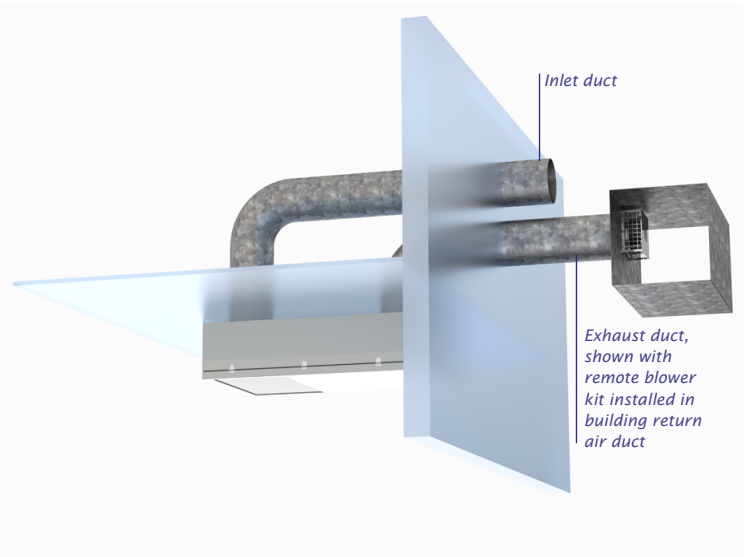
Tacit's temperature sensor is now located exactly where you need it — right by the projector's inlet vent, and user settings allow you to set a target inlet temperature to suit the needs of your projector.

Ductwork (by others)

For best results, install 250mm (10") air ducts for air inlet and exhaust (200mm/8in for Tacit 050-150).

The exhaust duct should be as short as possible (maximum 10m/30ft), and with a minimum of sharp bends, to optimize airflow.

The inlet duct should ideally connect to an adjoining air-conditioned space, for best cooling and acoustic performance. DO NOT pull air from the building HVAC supply if it may be used for heating as well as air conditioning.



If it is impractical to bring inlet air from a remote location, use a length of padded flexible hose (250mm/10in ID) in an 'S' configuration to draw in air and muffle any noise escaping through the air inlet path.

In cases where additional ductwork is not feasible such as in historic buildings, consider Tempest's *Zen* standalone enclosures.

Tacit Hush Projector Enclosures

Tacit — or Zen?

Tempest also offers Zen standalone (ductless) indoor projector enclosures.

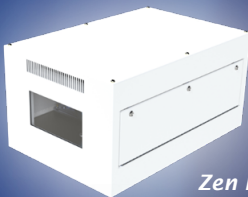
There is not much difference in noise attenuation between Tacit and Zen enclosures, but they both offer advantages for different types of application:

Use Tacit:

- Slightly better acoustic performance
- Portrait, UST versions
- Custom applications
- Hostile environments (eg: pool areas, theme park rides)
- if heat load in the space is an issue

Use Zen:

- Simple installation
- No air ducts
- Landscape format



Zen Info



Acoustic Performance

| Frequency (Hz) | Ambient dB | Projector (Panasonic PT-RZ21K) dB | Projector in Tacit 210.L Enclosure dB |
|----------------|------------|-----------------------------------|---------------------------------------|
| 20 | 19.4 | 28.2 | 21.9 |
| 25 | 17.8 | 29.9 | 21.7 |
| 32 | 13.6 | 24.7 | 18.5 |
| 40 | 17.3 | 24.0 | 26.7 |
| 50 | 12.2 | 23.2 | 25.8 |
| 63 | 16.3 | 26.6 | 25.9 |
| 80 | 15.0 | 25.1 | 23.9 |
| 100 | 7.3 | 28.3 | 24.5 |
| 125 | 8.0 | 31.6 | 27.1 |
| 160 | 1.6 | 34.0 | 25.8 |
| 200 | -1.5 | 37.7 | 26.2 |
| 250 | -1.2 | 39.0 | 27.6 |
| 315 | -1.7 | 36.3 | 22.4 |
| 400 | -1.1 | 35.7 | 20.4 |
| 500 | -0.4 | 37.0 | 16.7 |
| 630 | -0.1 | 36.2 | 13.7 |
| 800 | 0.6 | 35.4 | 13.5 |
| 1,000 | 1.3 | 35.5 | 11.4 |
| 1,250 | 1.9 | 34.2 | 8.6 |
| 1,600 | 3.9 | 31.9 | 6.0 |
| 2,000 | 3.4 | 29.6 | 5.2 |
| 2,500 | 4.3 | 31.8 | 5.2 |
| 3,150 | 5.2 | 29.1 | 5.8 |
| 4,000 | 6.2 | 23.0 | 6.4 |
| 5,000 | 7.0 | 19.9 | 7.1 |
| 6,300 | 7.6 | 17.6 | 7.6 |
| 8,000 | 7.9 | 14.8 | 7.9 |
| 10,000 | 8.0 | 13.9 | 8.0 |
| 12,500 | 8.0 | 12.2 | 8.0 |
| 16,000 | 8.1 | 13.3 | 8.1 |
| 20,000 | 8.7 | 21.0 | 8.3 |
| dBA | 17.0 | 44.0 | 25.5 |

Acoustic Performance Data

The data shown were generated in an anechoic chamber, using a Panasonic PT-RZ21K projector and a Tacit 56.210.L enclosure. Three tests were performed:

1. Ambient chamber sound pressure level
2. Projector, 100% ight output, on isolated mount
3. Projector, running in Zen enclosure, on isolated mount.

Detailed acoustic test data, from anechoic and reverberant chambers, are available for download [here](#).

Acoustic Test Setup (Anechoic Chamber)

Test Lab:

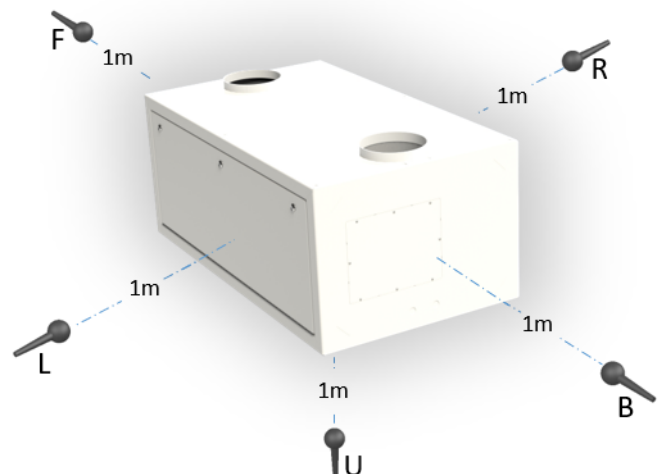
Western Electro-Acoustic Laboratory, Santa Clarita, California

Date: April 9th, 2021

Microphones:

1. 1m in front of test unit
2. 1m right of test unit
3. 1m left of test unit
4. 1m behind test unit
5. 1m below test unit

Mic values were integrated to arrive at the above values.



Tacit Hush Projector Enclosures

Tempest System Manager is a Windows app running on a local PC connected to your enclosures over a local area network.

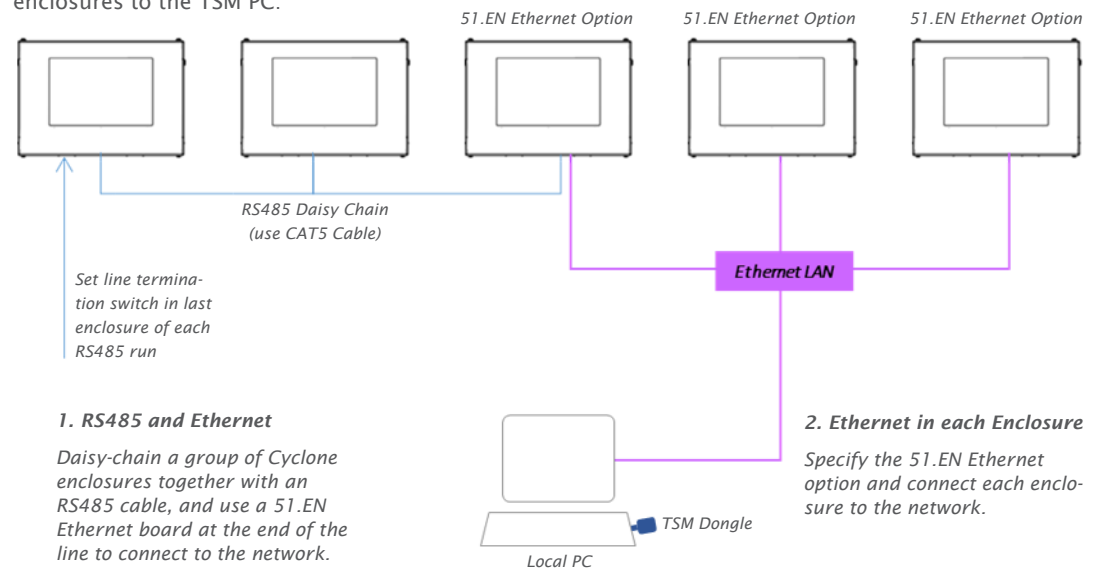
TSM discovers any Tempest enclosures present on the network at initialization, and monitors system attributes in real time, including lamp, fan and heater status, temperature, relative humidity and more.

TSM may also be used to upload firmware updates to enclosure controllers over the network, without having to visit each enclosure.

The TSM license includes 12 months unlimited user support from Tempest electronics partner JESE, and continuing support is available for a modest annual fee.

Monitoring Connections

There are two ways to connect enclosures to the TSM PC:

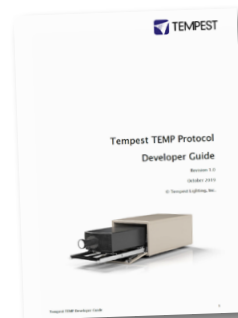


Tempest System Manager

| Index | Description | Label | Status | Voltage | Current | RH% | Temp °C | Htr % | Fan % |
|-------|-----------------|---------------------|----------|---------|---------|-------|---------|-------|--------|
| 1 | DEC4 Controller | Cyclone 310 Left 1 | Lamp On | 231V | 12.2A | 45.7% | 23.4°C | 0.0% | 100.0% |
| 2 | DEC4 Controller | Cyclone 310 Left 2 | Lamp on | 231V | 12.2A | 46.0% | 23.8°C | 0.0% | 100.0% |
| 3 | DEC4 Controller | Cyclone 310 Left 3 | Override | 231V | 0.0A | 49.4% | 22.6°C | 0.0% | 0.0% |
| 4 | DEC4 Controller | Cyclone 310 Left 4 | Tripped | 231V | 0.1A | 1.2% | 66.2°C | 0.0% | 100.0% |
| 5 | DEC4 Controller | Cyclone 310 Left 5 | Lamp on | 231V | 12.2A | 46.1% | 23.4°C | 0.0% | 100.0% |
| 6 | DEC4 Controller | Cyclone 310 Left 6 | Lamp on | 231V | 12.2A | 46.3% | 23.5°C | 0.0% | 100.0% |
| 7 | DEC4 Controller | Cyclone 310 Right 1 | Lamp on | 231V | 12.2A | 46.4% | 23.8°C | 0.0% | 100.0% |
| 8 | DEC4 Controller | Cyclone 310 Right 2 | Lamp on | 231V | 12.2A | 46.3% | 23.5°C | 0.0% | 100.0% |
| 9 | DEC4 Controller | Cyclone 310 Right 3 | Lamp on | 231V | 12.2A | 46.0% | 23.2°C | 0.0% | 100.0% |
| 10 | DEC4 Controller | Cyclone 310 Right 4 | Lamp on | 231V | 12.2A | 46.1% | 23.1°C | 0.0% | 100.0% |
| 11 | DEC4 Controller | Cyclone 310 Right 5 | Lamp on | 231V | 12.2A | 46.0% | 23.7°C | 0.0% | 100.0% |
| 12 | DEC4 Controller | Cyclone 310 Right 6 | Lamp on | 231V | 12.2A | 46.2% | 23.4°C | 0.0% | 100.0% |
| 13 | DEC4 Controller | ard 100 UST 1 | Standby | 231V | 0.2A | 51.3% | 22.1°C | 0.0% | 0.0% |
| 14 | DEC4 Controller | ard 100 UST 2 | Standby | 231V | 0.2A | 51.8% | 22.0°C | 0.0% | 0.0% |
| 15 | DEC4 Controller | ard 100 UST 3 | Standby | 231V | 0.2A | 51.4% | 22.2°C | 0.0% | 0.0% |
| 16 | DEC4 Controller | ard 100 UST 4 | Standby | 231V | 0.2A | 51.3% | 22.3°C | 0.0% | 0.0% |
| 17 | DEC4 Controller | ard 100 UST 5 | Standby | 231V | 0.2A | 51.3% | 21.8°C | 0.0% | 0.0% |
| 18 | DEC4 Controller | ard 100 UST 6 | Standby | 231V | 0.2A | 51.6% | 22.1°C | 0.0% | 0.0% |
| 19 | DEC4 Controller | ard 100 UST 7 | Standby | 231V | 0.2A | 51.5% | 21.4°C | 0.0% | 0.0% |
| 20 | DEC4 Controller | Blizzard 100 UST 8 | Standby | 231V | 0.2A | 51.7% | 22.2°C | 0.0% | 0.0% |

TSM Model Numbers

| | |
|-----------|---------------------|
| 51.TSM.10 | Up to 10 enclosures |
| 51.TSM.25 | Up to 25 enclosures |
| 51.TSM.50 | Over 25 enclosures |



TEMP Protocol

Tempest also publishes a simple protocol for use by integrators wishing to monitor enclosures over an existing control network.

Connection options are the same as for System Manager.

Download the TEMP Developer Guide [here](#):

Tacit Ordering Guide

| Tacit Projector Enclosure Dimensions ¹ | | | Enclosure | | | | | | | | Shipping | | | | | | | |
|---|--------------------------|--------------------------------------|-----------|--------|--------|-----|--------|--------|--------|-----|----------|--------|--------|-----|--------|--------|--------|-----|
| Model | Orientation ² | Typical Projectors ³ | L (cm) | W (cm) | H (cm) | Kg | L (in) | W (in) | H (in) | Lb | L (cm) | W (cm) | H (cm) | Kg | L (in) | W (in) | H (in) | Lb |
| 56.050.L | Landscape | Most, 5-7,000 Lumens | 74 | 76 | 37 | 27 | 29 | 30 | 15 | 59 | 91 | 91 | 61 | 43 | 36 | 36 | 24 | 94 |
| 56.050.P | Portrait | | 74 | 43 | 71 | 29 | 29 | 17 | 28 | 64 | 91 | 91 | 61 | 45 | 36 | 36 | 24 | 99 |
| 56.100.L | Landscape | Most, 7-10,000 Lumens | 86 | 81 | 39 | 39 | 34 | 32 | 16 | 85 | 91 | 91 | 61 | 55 | 36 | 36 | 24 | 120 |
| 56.100.P | Portrait | | 86 | 43 | 76 | 43 | 34 | 17 | 30 | 95 | 91 | 91 | 61 | 59 | 36 | 36 | 24 | 130 |
| 56.125.L | Landscape | Panasonic PT-MZ Series | 86 | 91 | 39 | 43 | 34 | 36 | 16 | 94 | 91 | 107 | 61 | 59 | 36 | 42 | 24 | 129 |
| 56.125.P | Portrait | | 86 | 43 | 86 | 47 | 34 | 17 | 34 | 104 | 91 | 107 | 61 | 63 | 36 | 42 | 24 | 139 |
| 56.150.L | Landscape | Most 12-15,000 Lumens | 107 | 81 | 44 | 48 | 42 | 32 | 18 | 106 | 132 | 86 | 51 | 69 | 52 | 34 | 20 | 151 |
| 56.150.P | Portrait | | 107 | 48 | 81 | 54 | 42 | 19 | 32 | 118 | 132 | 86 | 51 | 74 | 52 | 34 | 20 | 163 |
| 56.200.L | Landscape | Epson EB-PU 22xx | 86 | 91 | 46 | 48 | 34 | 36 | 18 | 106 | 107 | 112 | 71 | 85 | 42 | 44 | 28 | 186 |
| 56.200.P | Portrait | | 86 | 51 | 91 | 51 | 34 | 20 | 36 | 113 | 107 | 71 | 117 | 88 | 42 | 28 | 46 | 193 |
| 56.202.L | Landscape | Panasonic PT-RQ25K, DPI M-Vision 23K | 112 | 81 | 46 | 59 | 44 | 32 | 18 | 130 | 132 | 102 | 71 | 95 | 52 | 40 | 28 | 210 |
| 56.202.P | Portrait | | 112 | 51 | 76 | 62 | 44 | 20 | 30 | 135 | 132 | 71 | 102 | 98 | 52 | 28 | 40 | 215 |
| 56.204.L | Landscape | Christie M4K-25 | 117 | 81 | 51 | 62 | 46 | 32 | 20 | 136 | 137 | 102 | 76 | 98 | 54 | 40 | 30 | 216 |
| 56.204.P | Portrait | | 117 | 56 | 76 | 64 | 46 | 22 | 30 | 141 | 137 | 76 | 102 | 100 | 54 | 30 | 40 | 221 |
| 56.210.L | Landscape | Panasonic PT-RZ21K, Barco G100 | 127 | 91 | 51 | 82 | 50 | 36 | 20 | 181 | 147 | 112 | 76 | 119 | 58 | 44 | 30 | 261 |
| 56.210.P | Portrait | | 127 | 56 | 86 | 85 | 50 | 22 | 34 | 188 | 147 | 76 | 112 | 122 | 58 | 30 | 44 | 268 |
| 56.212.L | Landscape | Barco UDM/Njord | 122 | 86 | 56 | 81 | 48 | 34 | 22 | 179 | 142 | 107 | 81 | 118 | 56 | 42 | 32 | 259 |
| 56.212.P | Portrait | | 122 | 61 | 81 | 83 | 48 | 24 | 32 | 183 | 142 | 81 | 107 | 120 | 56 | 32 | 42 | 263 |
| 56.250.L | Landscape | Epson L-30000 | 127 | 94 | 51 | 94 | 50 | 37 | 20 | 206 | 147 | 114 | 76 | 130 | 58 | 45 | 30 | 286 |
| 56.250.P | Portrait | | 127 | 56 | 102 | 98 | 50 | 22 | 40 | 216 | 147 | 76 | 127 | 134 | 58 | 30 | 50 | 296 |
| 56.305.L | Landscape | Panasonic PT-RQ35K, RZ34K, Barco UDM | 132 | 86 | 61 | 93 | 52 | 34 | 24 | 205 | 152 | 107 | 86 | 141 | 60 | 42 | 34 | 310 |
| 56.305.P | Portrait | | 132 | 66 | 81 | 95 | 52 | 26 | 32 | 209 | 152 | 86 | 107 | 143 | 60 | 34 | 42 | 314 |
| 56.310.L | Landscape | Barco UDX 40K | 137 | 91 | 61 | 104 | 54 | 36 | 24 | 229 | 157 | 112 | 86 | 152 | 62 | 44 | 34 | 334 |
| 56.310.P | Portrait | | 137 | 66 | 86 | 107 | 54 | 26 | 34 | 235 | 157 | 86 | 112 | 155 | 62 | 34 | 44 | 340 |
| 56.314.L | Landscape | Christie Griffyn 32K | 147 | 91 | 61 | 109 | 58 | 36 | 24 | 239 | 168 | 112 | 86 | 157 | 66 | 44 | 34 | 344 |
| 56.314.P | Portrait | | 147 | 66 | 86 | 112 | 58 | 26 | 34 | 245 | 168 | 86 | 112 | 159 | 66 | 34 | 44 | 350 |
| 56.322.L | Landscape | DPI Titan Laser 37K | 142 | 94 | 61 | 128 | 56 | 37 | 24 | 283 | 163 | 114 | 86 | 176 | 64 | 45 | 34 | 388 |
| 56.322.P | Portrait | | 142 | 66 | 102 | 132 | 56 | 26 | 40 | 291 | 163 | 86 | 127 | 180 | 64 | 34 | 50 | 396 |
| 56.514.L | Landscape | Christie Griffyn 50K | 147 | 94 | 61 | 124 | 58 | 37 | 24 | 274 | 168 | 114 | 86 | 172 | 66 | 45 | 34 | 379 |
| 56.514.P | Portrait | | 147 | 66 | 97 | 128 | 58 | 26 | 38 | 283 | 168 | 86 | 122 | 176 | 66 | 34 | 48 | 388 |
| 56.522.L | Landscape | DPI Insight 8K 37K | 163 | 94 | 71 | 181 | 64 | 37 | 28 | 399 | 183 | 114 | 97 | 238 | 72 | 45 | 38 | 524 |
| 56.522.P | Portrait | | 163 | 76 | 112 | 186 | 64 | 30 | 44 | 409 | 183 | 97 | 137 | 243 | 72 | 38 | 54 | 534 |
| 56.525.L | Landscape | Panasonic PT-RQ50K | 163 | 94 | 66 | 145 | 64 | 37 | 26 | 319 | 183 | 114 | 91 | 202 | 72 | 45 | 36 | 444 |
| 56.525.P | Portrait | | 163 | 71 | 91 | 148 | 64 | 28 | 36 | 326 | 183 | 91 | 117 | 205 | 72 | 36 | 46 | 451 |

¹ Due to continuous product development, weights and dimensions are subject to change. Check with Tempest before construction work.

² Landscape and Portrait versions shown here. UST versions are custom or semi-custom. Please consult Tempest for details

³ For projectors not shown here, please contact Tempest — we will be happy to accommodate any projector type

All Tacit products are built to order. Please contact Tempest 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

Custom Colors

The enclosures in this brochure are shown in our standard warm white semi-gloss or black. Any RAL color available to special order.

Options

| | |
|------------------|--|
| 56.UR.xxx | Unistrut Rail Kit (Use the 3-digit enclosure model #, eg 56.UR.200 for Tacit 56.200) |
| 51.IFL11 | Replacement Inlet Filter Tacit 56.1xx-3xx Models |
| 51.IFL13 | Replacement Inlet Filter Tacit 56.400 and up |
| 51.EN | Ethernet Board, for Tempest TEMP monitoring |
| 51.TSM.xx | Tempest System Manager |
| 0000.CL | Custom Color — specify any RAL #, plus % gloss desired |

CAD drawings and user manuals at www.tempest.biz

Tacit Configurator

Please complete this form and email to us at info@tempest.biz

| | | | |
|-------------------------------|--|----------|-----|
| Name * | | | |
| Company * | | | |
| Email * | | | |
| Phone | | | |
| Project Name & Location * | | | |
| Projector & Lens Make/Model # | Projector: * | Lens: * | |
| Tacit Model * | 56. | Quantity | |
| Destination Country * | | | |
| Expected Install Date * | | | |
| Enclosure Type * | Landscape | Portrait | UST |
| Projector Slide * | | | |
| Projector Mount * | Landscape/UST: Feet Down Feet Up Portrait: Feet Left Feet Right | | |
| Supply Voltage * | | | |
| Options | | | |
| Cyclovator | Qty | | |
| Angle Mount Kit | Qty | | |
| Unistrut Kit | Qty | Mounting | |
| Ethernet Comms | Qty | Type | |
| Windshield Wiper | Qty | | |
| Spare Inlet Filter | Qty | | |

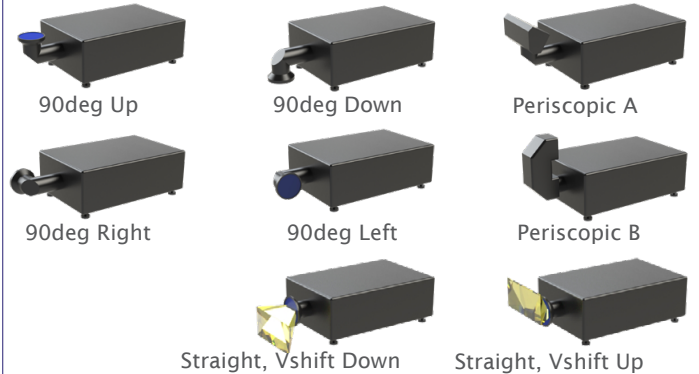
Projector Power Outlet (all types include IEC 60320 C13 Aux Power):

Select Type:

Custom:

| | | |
|---|----------------------|-------|
| Color, standard | Black | White |
| Color, custom | Custom, RAL # | |
| Gloss levels higher than 30% may show up weld marks. Tempest accepts no responsibility in this event. | Gloss Level | % |
| | Salt Fog Primer: Yes | No |

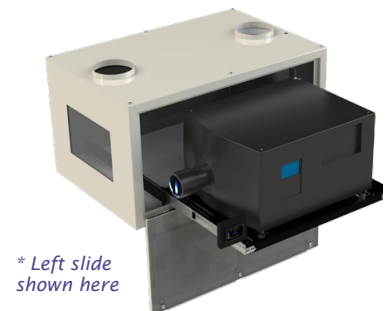
UST Lens Configuration:



Custom Requests:

| | | |
|-------------------|-------------|-----------|
| Factory Use Only: | SO #: | Date: |
| Electrical: | IEC NEMA | Wiring p: |
| Test: | Function | Projector |
| Hardware Kit: | | |

User manuals,
2D and 3D CAD
drawings at
www.tempest.biz



* Left slide
shown here

 Made in the USA

©Tempest Lighting, Inc., March, 2024

In the interest of continuous product improvement, specifications are subject to change without notice

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www.tempest.biz info@tempest.biz

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