

Tholus Planetariums - Decision guide and technical sheets

Verifiable comparison for management, designers and procurement

Executive comparison

Air is mobile, spans 5-10 m and starts at EUR 7.900. Venue is semi-permanent, spans 5-12 m and starts at EUR 24.900. Landmark is permanent, spans 9-30 m and starts at EUR 159.000.

Feature	Tholus Air	Tholus Venue	Tholus Landmark
Available diameters	5, 6 and 10 m	5, 6, 8, 9, 10 and 12 m	9, 15, 20, 25 and 30 m
Indicative capacity	15-65 seats; up to 110 standing	15-90 seats; up to 140 standing	55-510 seats; up to 925 standing
Starting scope	Dome, projection, audio, base content, software, server, training and 2-year warranty	Geodesic dome, screen, projection, audio, base content, software, server, training and 2-year warranty	Rigid dome, screen, multi-projection, audio, base content, software, server, design, installation, testing and 3-year warranty
Mobility	Foldable and designed to travel	Demountable; relocation planned between programme cycles	Permanently integrated into the building or destination
Assembly or delivery	Assembly and recalibration: about 30 min for 5-6 m; about 1 hour for 10 m	Site assembly is planned; recalibration takes about 30-60 min depending on the system	Schedule defined in the executive design; multi-projector recalibration takes about 1 hour
Space and usual site works	Level surface, height, access, power and ventilation; normally no permanent works	Verified space and services; outdoor use needs engineered anchors or ballast. Permits, masonry and non-standard bases are excluded	Coordination with building, structure, access and services. Permits, masonry and non-standard bases are excluded
Best suited to	Schools, museums, tours and temporary events	Venues, festivals and seasonal or recurring cultural programmes	Museums, campuses, science centres and permanent destinations

Prices exclude VAT. Capacity depends on layout, technical area, aisles, exits and approvals. Stated times cover assembly or recalibration in a ready space; delivery, site works and commissioning are confirmed after the site review.

Timing: what is already known

The setup and recalibration times below assume a ready site. Delivery, works, permits and commissioning are planned after site verification and confirmed in the proposal.

Technical sheet - Tholus Air

A verifiable technical configuration for every diameter.

Diameters and configurations	Included equipment
Tholus Air 5 - EUR 7.900	5-metre double-membrane dome; 7,500-lumen projector; Convex-mirror system; TholusOS Pro for 1 year
Tholus Air 6 - EUR 9.900	6-metre double-membrane dome; 7,500-lumen projector; Convex-mirror system; TholusOS Pro for 1 year
Tholus Air 10 - EUR 19.900	10-metre double-membrane dome; 3 DLP projectors at 7,500 lumens; Calibrated multi-projection; TholusOS Pro for 1 year

Indicative capacities

Diameter	Planetarium: children seated on floor	Planetarium: seated adults	Fulldome with chairs	Standing event
5	35-40	20-25	15	30
6	45-55	30-40	20	30-35
10	-	-	55-65	100-110

Capacities depend on the layout and approvals. Technical space, aisles, exits, seating and venue requirements may reduce the actual number.

System and performance

Standard projectors

Single-chip DLP, 7,500 lumens, 1920 × 1200 and 1500:1 contrast per projector.

Usable brightness

Optics, mirror, warping and calibration reduce nominal brightness. Usable dome brightness is measured after calibration.

Blending and resolution

In multi-projection, overlap zones use part of the pixels and light to merge images, so effective resolution is lower than the mathematical sum of the projectors.

Operational continuity and maintenance - Tholus Air

The SLA defines priorities, acknowledgement and spare-parts handling.

Uniformity with TholusOS

TholusOS corrects geometry, colour and brightness to equalise the dome. Output can vary between points.

Calibration

Guided calibration takes approximately 30 minutes. Single-projector inflatable systems take approximately 30 minutes to assemble and recalibrate; multi-projection takes approximately 1 hour.

Included equipment

Dome inflation blower; Audio system; Mirror projection on single-projector versions; calibrated multi-projection where specified; Base content package; Stellarium and WorldWide Telescope; 2 immersive games; Operational training; Tholus server; TholusOS in the package version; 2-year European warranty

Warranty

2-year European warranty on the supplied dome and components, under the contract terms and applicable law.

SLA response times

P1, system stopped or show impossible: acknowledged within 1 business day. P2, degraded service: within 2 days. P3, non-blocking requests: within 3 days.

Replacement

A covered critical spare is dispatched within 3 business days when in stock. Otherwise, we provide a dated recovery plan within 2 days. Transit time depends on the destination.

Spare parts

The original component or a compatible replacement remains available for at least 10 years after delivery. Critical spares are identified in the technical documentation.

Remote assistance

Included during the warranty for diagnostics, configuration, TholusOS and calibration support, with access agreed with the customer.

On-site service

Available across Europe on request. After diagnosis, we provide a plan and quotation within 3 business days, targeting an intervention within 10 business days, subject to site access and travel.

Maintenance programme

Annual preventive programme covering structure, ventilation, projection, audio, server, safety and calibration, plus an additional check after relocation or work on optical components.

Delivery package

Every Tholus Air is delivered as a complete, documented mobile system.

- Dome blower sized for the enclosure and identification of the compatible replacement.
- Sized audio, projection, Tholus server and TholusOS configuration.
- Starter content package, Stellarium, WorldWide Telescope and 2 games.
- Operator training and procedures for assembly, checks and shutdown.
- Manuals, electrical diagram, critical-spares list and configuration record.
- Conformity dossier prepared for the applicable rules and destination-country requirements.

Commercial scope and conditions

Each diameter price covers the standard Tholus Air system. Transport and on-site work are defined after the space review.

Included	Tholus Air system	Dome, specified projection, audio, server, software, starter content, operator training and the warranty stated in the technical specification.
Separate	On-site services and equipment	Transport, installation at the venue, seating and bespoke content are quoted separately.

Prices exclude VAT. The selected model identifies the standard supply; transport, on-site installation, seating and bespoke content remain separate.

Technical sheet - Tholus Venue

A verifiable technical configuration for every diameter.

Diameters and configurations	Included equipment
Tholus Venue 5	5-metre geodesic dome; Negative-pressure fulldome screen; Mirror or fisheye projection; TholusOS Pro for 1 year
Tholus Venue 6	6-metre geodesic dome; Negative-pressure fulldome screen; 3-projector system; TholusOS Pro for 1 year
Tholus Venue 8	8-metre geodesic dome; Negative-pressure fulldome screen; 3-projector system; TholusOS Pro for 1 year
Tholus Venue 9	9-metre geodesic dome; Negative-pressure fulldome screen; 3-projector system; TholusOS Pro for 1 year
Tholus Venue 10	10-metre geodesic dome; Negative-pressure fulldome screen; 5-projector system; TholusOS Pro for 1 year
Tholus Venue 12	12-metre geodesic dome; Negative-pressure fulldome screen; 5-projector system; TholusOS Pro for 1 year

Indicative capacities

Diameter	Planetarium: children seated on floor	Planetarium: seated adults	Fulldome with chairs	Standing event
5	35-40	20-25	15	30
6	45-55	30-40	20	30-35
8	80-100	65-80	30-35	45-50
9	-	-	55-65	60-70
10	-	-	55-65	100-110
12	-	-	80-90	125-140

Capacities depend on the layout and approvals. Technical space, aisles, exits, seating and venue requirements may reduce the actual number.

System and performance

Standard projectors

Single-chip DLP, 7,500 lumens, 1920 × 1200 and 1500:1 contrast per projector.

Usable brightness

Optics, warping, blending and calibration reduce nominal brightness. Usable dome brightness is measured after calibration.

Blending and resolution

Overlap zones use part of the pixels and light to merge images, so effective resolution is lower than the mathematical sum of the projectors.

Operational continuity and maintenance - Tholus Venue

Installation closes only when the system, operators and documentation are ready. After commissioning, the SLA governs diagnosis, recovery and maintenance.

Uniformity with TholusOS

TholusOS corrects geometry, colour and brightness to equalise the dome. Output can vary between points.

Calibration

Guided calibration takes approximately 30 minutes. The single-projector setup takes approximately 30 minutes to assemble and recalibrate; multi-projection takes approximately 1 hour.

Negative-pressure system

The pump draws between 0.5 and 1.5 kW depending on dome diameter and configuration. Declared sound level is 50-56 dB in normal operation and 65-70 dB at maximum output; perceived noise depends on placement and acoustic treatment.

Included equipment

Audio system; Mirror projection on the single-projector version; calibrated multi-projection on the other diameters; Base content package; Stellarium and WorldWide Telescope; 2 immersive games; Operational training; Tholus server; TholusOS Pro for 1 year; 2-year European warranty

Warranty

2-year European warranty on the supplied structure and components, under the contract terms and applicable law.

SLA response times

P1, system stopped or show impossible: acknowledged within 1 business day. P2, degraded service: within 2 days. P3, non-blocking requests: within 3 days.

Replacement

A covered critical spare is dispatched within 3 business days when in stock. Otherwise, we provide a dated recovery plan within 2 days. Transit time depends on the destination.

Spare parts

The original component or a compatible replacement remains available for at least 10 years after delivery. Critical spares are identified in the technical documentation.

Remote assistance

Included during the warranty for diagnostics, configuration, TholusOS and calibration support, with access agreed with the customer.

On-site service

Available across Europe on request. After diagnosis, we provide a plan and quotation within 3 business days, targeting an intervention within 10 business days, subject to site access and travel.

Maintenance programme

Annual preventive programme covering structure, ventilation, projection, audio, server, safety and calibration, plus an additional check after relocation or work on optical components.

Venue institutional supply

The supply includes commissioning, verified performance and documentation.

- Installation, calibration, testing and commissioning at the agreed venue.
- Audio system sized for the diameter, audience and intended use.
- Operator training and handover of the verified configuration.
- Starter content package, Stellarium, WorldWide Telescope and 2 games.
- 2-year European warranty and support governed by the published SLA.
- Complete standby negative-pressure pump delivered and identified as a critical spare.
- Manuals, diagrams, calibration record, maintenance plan and spare-parts list.
- Conformity dossier prepared for the applicable rules and destination-country requirements.

Commercial scope and conditions

The published price covers the Venue system. On-site activities and local works are defined only after a technical review of the location.

Included	Standard supply	Geodesic dome, fulldome screen, specified projection, audio, standard PVC floor, server, software, starter content, training and warranty.
In the proposal	Activities at the venue	Transport, on-site assembly and installation, calibration, testing, commissioning, seating and bespoke content.
Local works	Building-project responsibility	The local project retains building permits or other approvals that may be required, masonry, foundations, utility connections and bases other than the standard PVC flooring we supply.

Prices exclude VAT. Standard supply is separate from transport, on-site activities, seating, bespoke content and local works.

Technical sheet - Tholus Landmark

A verifiable technical configuration for every diameter.

Diameters and configurations	Included equipment
Tholus Landmark 9	9-metre rigid dome; Acoustically transparent aluminium; Calibrated multi-projector system; TholusOS Enterprise for 5 years
Tholus Landmark 15	15-metre rigid dome; Acoustically transparent aluminium; Calibrated multi-projector system; TholusOS Enterprise for 5 years
Tholus Landmark 20	20-metre rigid dome; Acoustically transparent aluminium; Calibrated multi-projector system; TholusOS Enterprise for 5 years
Tholus Landmark 25	25-metre rigid dome; Acoustically transparent aluminium; Calibrated multi-projector system; TholusOS Enterprise for 5 years
Tholus Landmark 30	30-metre rigid dome; Acoustically transparent aluminium; Calibrated multi-projector system; TholusOS Enterprise for 5 years

Indicative capacities

Diameter	Planetarium: children seated on floor	Planetarium: seated adults	Fulldome with chairs	Standing event
9	-	-	55-65	60-70
15	-	-	130-145	220-240
20	-	-	200-220	400-440
25	-	-	320-345	800-890
30	-	-	450-510	850-925

Capacities depend on the layout and approvals. Seating, technical space, aisles, exits, accessibility and building requirements determine the actual number.

System and performance

Standard projectors

Single-chip DLP, 7,500 lumens, 1920 × 1200 and 1500:1 contrast per projector.

Usable brightness

Optics, warping, blending and calibration reduce nominal brightness. Usable dome brightness is measured after calibration.

Blending and resolution

Overlap zones use part of the pixels and light to merge images, so effective resolution is lower than the mathematical sum of the projectors.

Operational continuity and maintenance - Tholus Landmark

Commissioning, spares and maintenance are defined for the installed theatre.

Uniformity with TholusOS

TholusOS Enterprise corrects geometry, colour and brightness to equalise the dome. Output can vary between points.

Calibration

Guided calibration takes approximately 30 minutes. Initial assembly follows detailed design; multi-projector recalibration takes approximately 1 hour.

Included equipment

Audio system; Complete projection system: mirror projection where a single channel is specified, calibrated multi-projection in other cases; Base content package; Stellarium and WorldWide Telescope; 2 immersive games; Operational training; Tholus server; TholusOS Enterprise for 5 years; 3-year European warranty

Warranty

3-year European warranty on the Tholus Landmark supply, under the contract terms and applicable law.

SLA response times

P1, system stopped or show impossible: acknowledged within 1 business day. P2, degraded service: within 2 days. P3, non-blocking requests: within 3 days.

Replacement

A covered critical spare is dispatched within 3 business days when in stock. Otherwise, we provide a dated recovery plan within 2 days. Transit time depends on the destination.

Spare parts

The original component or a compatible replacement remains available for at least 10 years after delivery. Critical spares are identified in the technical documentation.

Remote assistance

Included during the warranty for diagnostics, configuration, TholusOS and calibration support, with access agreed with the customer.

On-site service

Available across Europe on request. After diagnosis, we provide a plan and quotation within 3 business days, targeting an intervention within 10 business days, subject to site access and travel.

Maintenance programme

Annual preventive programme covering structure, ventilation, projection, audio, server, safety and calibration, plus an additional check after relocation or work on optical components.

Landmark institutional supply

Handover includes testing, training and documentation.

- Installation, calibration, testing and commissioning of the theatre.
- Audio system sized for the geometry, audience and operating programme.
- Operator training and handover of the verified configuration.
- Starter content package, Stellarium, WorldWide Telescope and 2 games.
- 3-year European warranty and support governed by the published SLA.
- Project-defined critical spare kit delivered at commissioning.
- Manuals, as-built diagrams, calibration record, maintenance plan and spare-parts list.
- Conformity dossier prepared for the applicable rules and destination-country requirements.

Commercial scope and conditions

The published price identifies the TUN supply. The building, local works and operating costs remain separate scopes to coordinate during the preliminary study.

TUN supply	Tholus system	Rigid dome, screen, multi-projection, audio, server, software, starter content, training, TholusOS Enterprise and warranty.
Within TUN scope	Design and commissioning	Detailed system design, technical coordination, assembly, calibration, testing, commissioning, documentation and certifications within our responsibility.
Outside TUN supply	Building and local works	Building, foundations, building permits or other approvals that may be required, masonry, services, local utility connections and bases other than the standard PVC flooring we supply are the client's or local design team's responsibility.
Outside initial investment	Maintenance and operating costs	Staff, energy, planned maintenance after the included period, consumables, uncovered spares and software renewals are planned separately.

Prices exclude VAT. The proposal confirms the TUN scope against the real site and coordinates interfaces with the building, local works and future operation.