

ORION

Confined Data Center

OPENN

Confined Data Center



Who we are

barpa is an international brand owned by Argon Group, a global business group headquartered in Portugal.

Founded in 2016, barpa specializes in the design, manufacturing and commercialization of Structured Cabling Solutions, offering a complete portfolio that includes Copper Systems, Optical Fiber Systems, Racks and Cabinets. With its headquarters and distribution center in Portugal and an office in Madrid, barpa operates as a trusted supplier in more than 20 countries.



barpa

The future
of networks
needs
structure.

It needs
barpa.

Driven by proximity, quality and innovation, we design resilient and secure infrastructures that ensure uninterrupted connectivity across multiple applications.

We aspire to become one of the most influential and forward-thinking companies in our industry worldwide.



Our purpose is clear

Unite **Humanity** through **Telecommunications** across **Generations**.

What Sets Us Apart

True differentiation comes from consistency, passion and purpose.

1 Trust That Inspires Confidence

Recognized for our quality, reliability and commitment, barpa has earned a strong reputation in the structured cabling industry.

2 Technical Expertise and Customization Capability

We have a highly specialized team and flexible processes that enable us to develop and produce tailored solutions to each client's specific needs.

3 Proximity That Builds Partnerships

We believe success is built together with proximity, collaboration and personalized support.

4 Driven by People

We foster a culture of collaboration, improvement and commitment, ensuring that every step we take brings us closer to our shared purpose.

5 Innovation at the Core

Innovation is part of our DNA. Our R&D department works continuously to create next-generation technological solutions, ensuring that every barpa product is aligned with the evolution of the industry and the future of connectivity.

6 Committed to Sustainability

We are committed to sustainable growth and responsible innovation. Through our ESG Committee and internal Turn Green initiatives, we promote efficient, sustainable practices, minimizing waste and optimizing resources.

7 Certified Quality

Our ISO 9001:2015 and ISO 14001:2015 certifications guarantee that every process meets the highest standards of quality, safety and environmental performance.

barpa is a proud member of **BICSI**, one of the most prestigious associations in the ICT industry worldwide.

This affiliation connects us to a global network of expertise and innovation, keeping us aligned with the latest technologies and best practices. It strengthens our ability to deliver reliable, future-ready solutions.

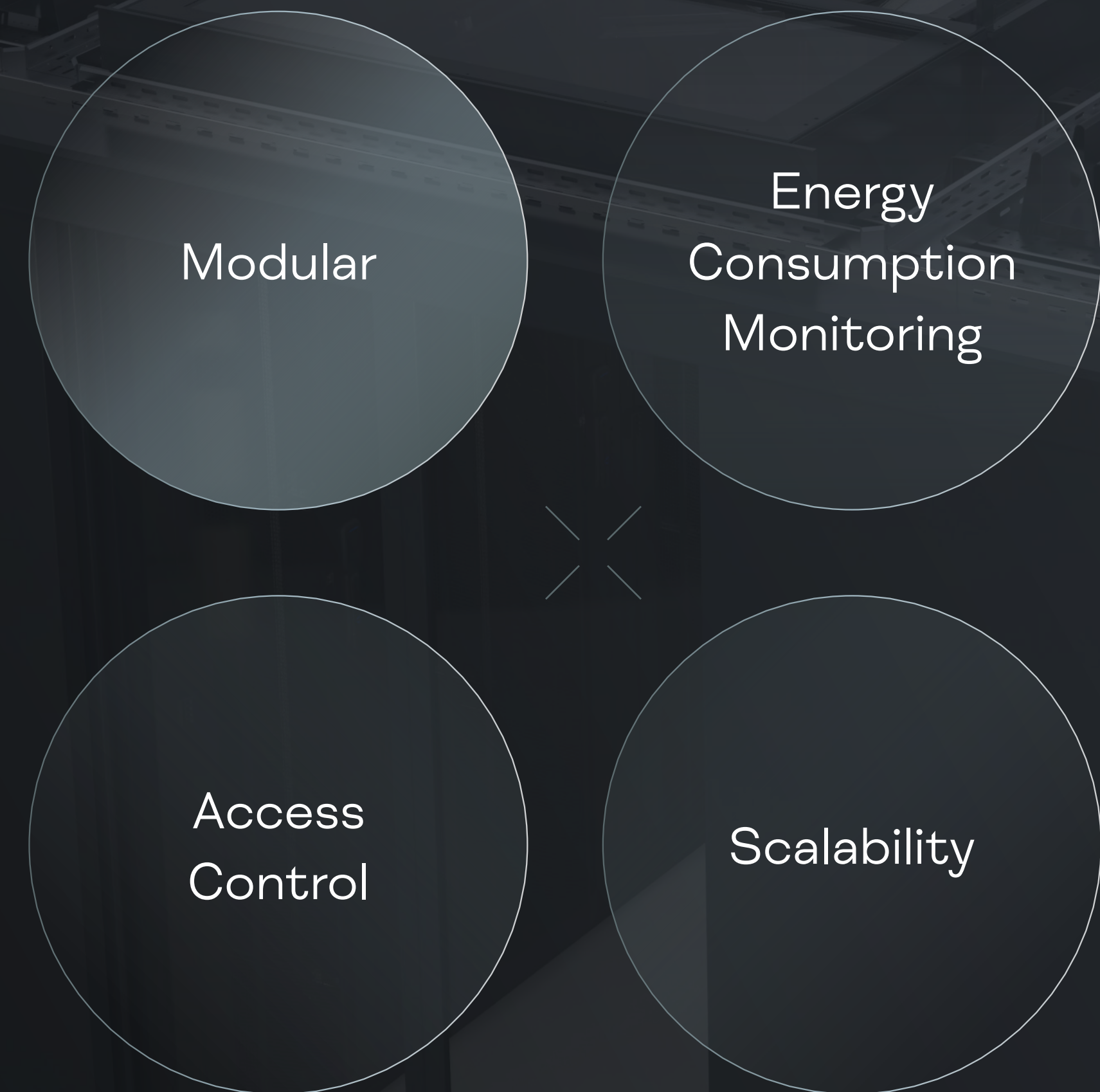


Building Data Centers That Evolve With You

There is no out-of-the-box design for Data Centers. Each Data Center must be designed to and cover the particular needs of the end user. These needs can vary largely depending on **parameters such as the need for reliability, availability, maintainability and scalability.**

They can go from a **Hyperscale Data Center** to a **Single Cabinet** communications room. barpa has solutions for each of them.

Confined Data Centers are the ideal solution when you need to give housing service for high demanding customers. As they are a **modular and scalable solution** they can grow at the same space as your needs do.



Choosing the Right Partner is Key for Success

Designing a Confined Data Center is not an easy task. It starts with defining what you need today and anticipating your future requirements.

That's a tough one.

And once you have that definition, the next challenge is turning it into a design that can actually be implemented.

This is why you need a partner who can support you throughout the entire process: definition, design, installation supervision, commissioning, and post-sales support.

For sure barpa is this partner.



Solutions that adapt to your reality

barpa has rapidly earned a solid reputation for delivering reliable, high-quality and innovative structured cabling solutions.

This is the result of combining highly motivated young talent with professionals holding 30+ years of field expertise.

Our Engineering Department supports you from the first idea to the final delivery of your Confined Data Center.

Step 1

We begin by identifying your current and future requirements, initiating a process that brings clarity to every question throughout the project.

Step 2

Our team develops the Data Center design based on all insights gathered, ensuring full alignment with your project specifications.

Step 3

Certified barpa Data Center Integrators carry out the installation of all passive components and Monitoring / Monitoring & Control systems, under our close supervision.

Step 4

The final stage is the commissioning phase. We verify that the Confined Data Center has been installed according to the design, validate its performance, and document the entire process. After commissioning, our post-sales support continues as part of our commitment to ensuring a reliable and stable operation over time.

Each project is unique. Our Engineering Department and R&D work together to design and produce the components required to meet the specific technical needs of your projects.

Building a data center is never a one-size-fits-all process.

Every project has its own technical requirements, each demanding a tailored approach.

That's why barpa presents **ORION**.

A complete and integrated solution designed to simplify the definition, the design and implementation of your Confined Data Center, without forcing you into a standard that doesn't fit.



Designed for
scalability,
reliability,
and control

The **ORION** concept brings together
three complementary segments that
operate as one, integrated ecosystem
for the next generation of Data
Centers.

ORION Structure

Mechanical infrastructure &
containment solutions for
Confined Data Centers.

ORION Intelligence

Monitoring, power, and access
systems for operational
control.

ORION Connectivity

High-density fiber and copper
systems ensuring network
performance

ORION

Structure

Mechanical Infrastructure & Containment Solutions.

At the core of the **ORION** solution lies its structural foundation, engineered to support the most demanding Confined Data Center environments.



Confined Data Centers are modular by design.

Adaptable, configurable and scalable to
your project’s needs.

From compact **single-row** layouts for edge or limited spaces, to larger **double-row** architectures for high-density environments, **ORION** adapts naturally to the space and requirements of each installation.

Whatever the scale, its modular design ensures consistent performance, efficient airflow, and rapid installation.

Scalable architecture	Enables capacity expansion without downtime or structural modification.
Accelerated deployment	Prefabricated and factory-tested modules ensure fast installation and commissioning.
Optimized airflow & cooling	Precision containment improves thermal performance and reduces energy loss.
Reduced TCO (Total Cost of Ownership)	Lower energy usage, simplified maintenance, and efficient space utilization.
Sustainable engineering	Reusable components and high-efficiency operation minimize environmental impact.

Single-Row



Double-Row

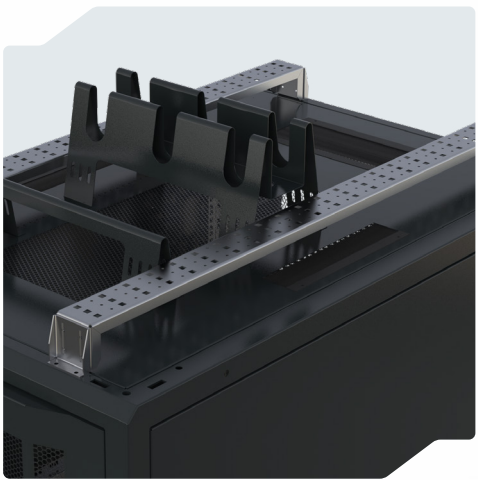




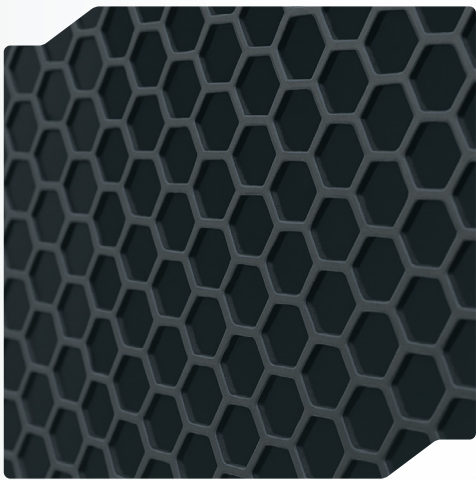
Racks Specifications



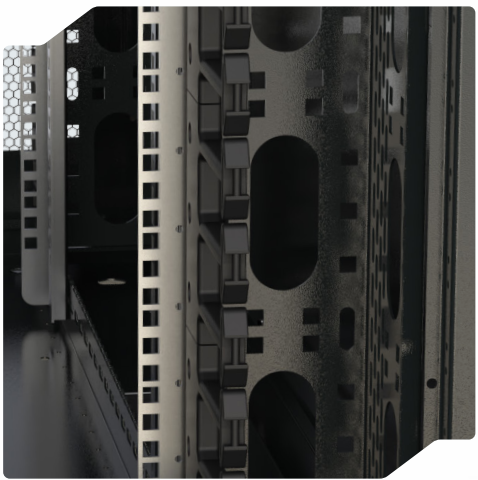
Heights 42U / 47U
Widths 600 mm and 800 mm
Depth 1200 mm
Static load Up to 2000 kg



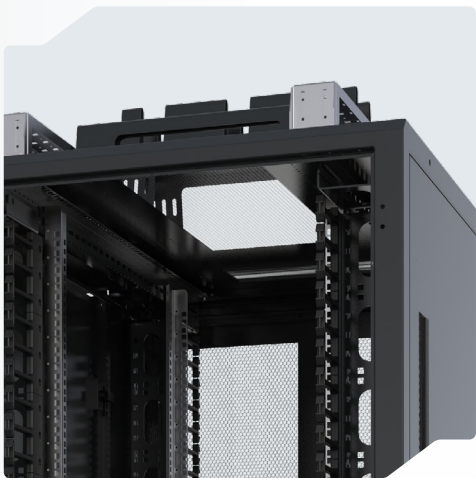
Brush Cable Entries
Multiple brush entries for clean pass-through and reduced air leakage



Front & rear perforated doors
80% open area for optimized airflow and efficient hot/cold aisle containment



Vertical organizers
With cable-management fingers for structured, high-density patch-cord routing



Perforated top covers
Improve upward airflow and prevent heat accumulation at the top of the cabinet.



Ensure proper electrical bonding and operational safety.



Allow lateral cable transitions while preserving airflow containment.



Optimized for rear vertical PDUs
Provides the space required for vertical PDUs in equipment-heavy racks.

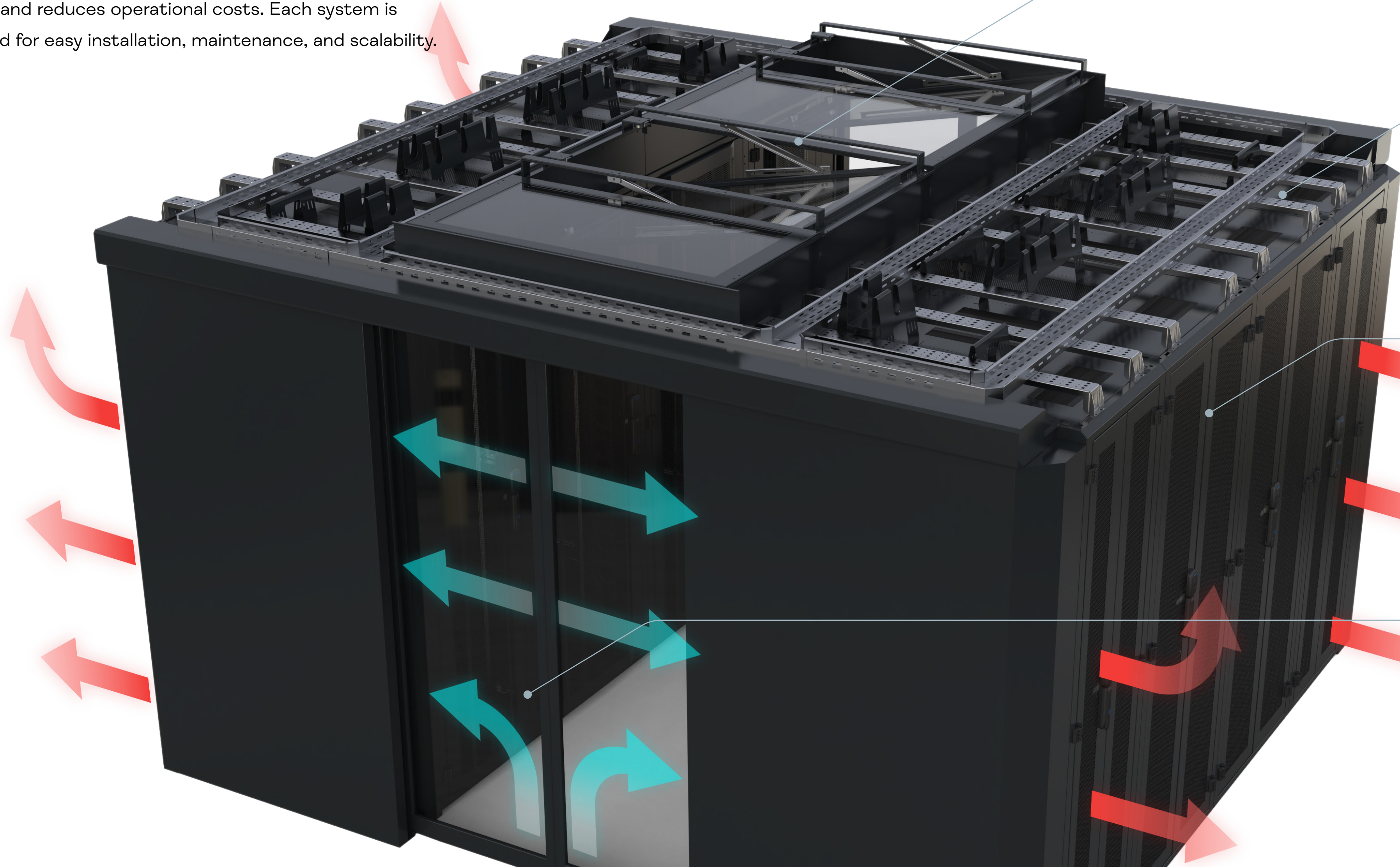
ORION Racks



Code	Description	U	Width (mm)	Depth (mm)
82410000000	ORION Rack - 42U 600x1200mm	42	600	1200
82410001000	ORION Rack - 42U 800x1200mm		800	
82410010000	ORION Rack - 47U 600x1200mm	47	600	
82410011000	ORION Rack - 47U 800x1200mm		800	

ORION **STRUCTURE**

The containment system is a key component of **ORION** Structure, ensuring precise airflow management and stable temperature control. By separating the cold aisle from the hot aisle, it increases cooling efficiency, enhances equipment reliability, and reduces operational costs. Each system is engineered for easy installation, maintenance, and scalability.



Roof Panels

Maintain airflow containment and thermal performance

Available in different materials

Optional integration with sensors for automatic opening

Cable Trays

Modular design for structured cable routing

Easy access for maintenance and reconfiguration

Structure & Materials

All-metal framework with high static load capacity

Powder-coated finish for corrosion resistance

Ensures containment performance along full rack height

Corridor Doors

Manual or automatic versions

Single or double-leaf sliding configurations

Designed for airflow containment and access-control integration

Roof Panels



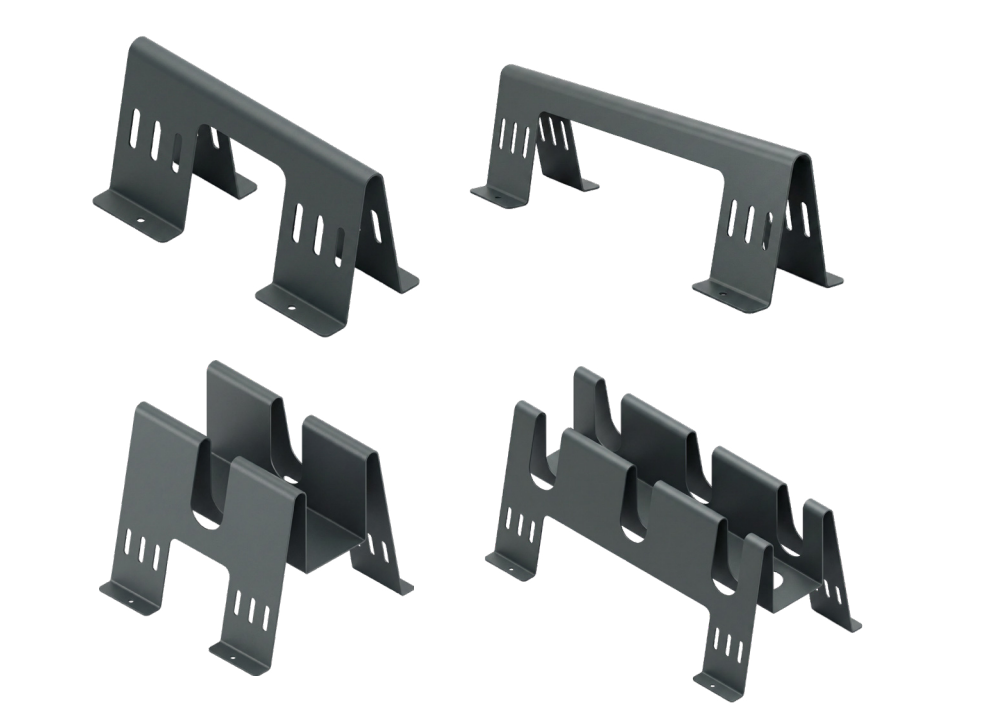
Code	Description	Type	Width (mm)	Length (mm)	Weight (kg)
82420000000	ORION Fixed Roof - 600x1200mm	Fixed	600	1200	7,0
82420000010	ORION Fixed Roof - 800x1200mm		800		8,5
82420010001	ORION Opening Roof - 600x1210mm	Opening	600	1210	11,0
82420010011	ORION Opening Roof - 800x1210mm		800		12,5

Corridor Doors



Code	Description	Height	Door Mechanism	Door Types
82420100000	ORION 42U Single Sliding Manual Corridor Doors	42U	Manual	Single Panel
82420110000	ORION 42U Double Sliding Manual Corridor Doors			Double Panel
82420120000	ORION 42U Single Sliding Automatic Corridor Doors		Automatic	Single Panel
82420130000	ORION 42U Double Sliding Automatic Corridor Doors			Double Panel
82420100001	ORION 47U Single Sliding Manual Corridor Doors	47U	Manual	Single Panel
82420110001	ORION 47U Double Sliding Manual Corridor Doors			Double Panel
82420120001	ORION 47U Single Sliding Automatic Corridor Doors		Automatic	Single Panel
82420130001	ORION 47U Double Sliding Automatic Corridor Doors			Double Panel
82420140100	ORION 42U Corridor End Closure Plexiglass	42U	-	Corridor End Closure
82420140000	ORION 42U Corridor End Closure Tempered Glass			
82420140101	ORION 47U Corridor End Closure Plexiglass	47U		
82420140001	ORION 47U Corridor End Closure Tempered Glass			

Cable Separator



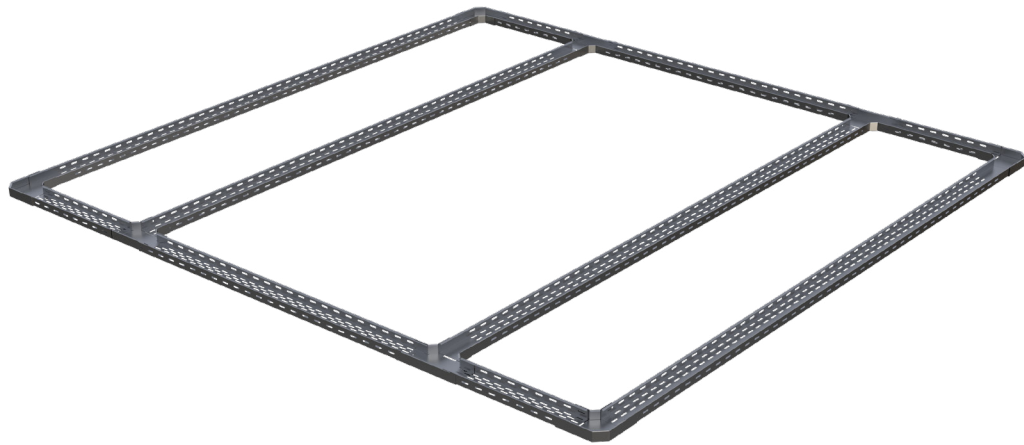
Code	Description	Compatiblity	Type	Weight (kg)	Dimension (mm)
82420200000	ORION Cable Separator A Type 600mm	600mm	A	0,5	223x92x110
82420200010	ORION Cable Separator A Type 800mm	800mm		0,6	423x92x111
82420210000	ORION Cable Separator M Type 600mm	600mm	M	1,3	223x225x201
82420210010	ORION Cable Separator M Type 800mm	800mm		1,6	423x225x201

Cable Tray Support



Code	Description	Compatibility	Weight (kg)	Dimensions (mm)
82420400000	ORION Cable Tray Support	1200mm	2,2	1151x70x75

Cable Tray



Code	Description	Type	Height (mm)	Width (mm)
82420301105	ORION 50x100 mm Perforated Cable Tray	Straight	50	100
82420301205	ORION 50x200 mm Perforated Cable Tray	Straight	50	200
82420301305	ORION 50x300 mm Perforated Cable Tray	Straight	50	300
82420301405	ORION 50x400 mm Perforated Cable Tray	Straight	50	400
82420302105	ORION 50x100 mm Perforated Cable Tray Corner	Corner	50	100
82420302205	ORION 50x200 mm Perforated Cable Tray Corner	Corner	50	200
82420302305	ORION 50x300 mm Perforated Cable Tray Corner	Corner	50	300
82420302405	ORION 50x400 mm Perforated Cable Tray Corner	Corner	50	400
82420303105	ORION 50x100 mm Perforated Cable Tray Tee	Tee	50	100
82420303205	ORION 50x200 mm Perforated Cable Tray Tee	Tee	50	200
82420303305	ORION 50x300 mm Perforated Cable Tray Tee	Tee	50	300
82420303405	ORION 50x400 mm Perforated Cable Tray Tee	Tee	50	400



ORION

Intelligence

ORION Intelligence

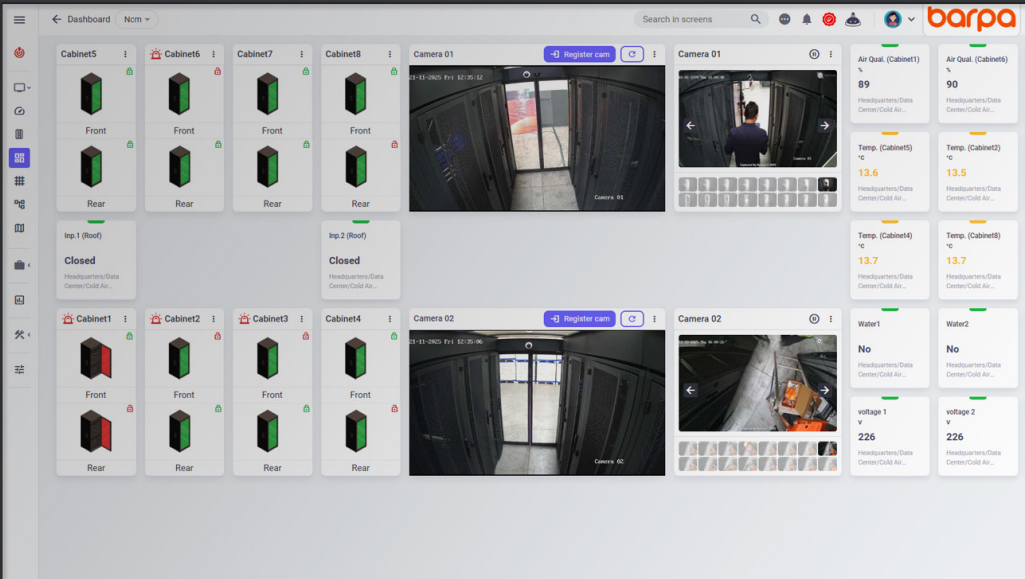
Monitoring, power and access systems for operational control.

ORION Intelligence is the digital core of the **ORION Solution**, the layer that connects, controls, monitors and protects every critical element of the confined data center infrastructure.

Engineered to integrate access control, environmental sensors, intelligent power distribution, and centralized monitoring, it delivers total visibility and operational command over each rack, aisle and technical subsystem.

By transforming physical assets into connected, measurable, and automated systems, **ORION Intelligence** enables smarter, more sustainable and more predictable operations.

This solution is provided through a partnership with products developed and manufactured by **Birsens**, delivered by barpa as an integral part of the **ORION solution**, ensuring full integration and customer support.



Access Control Systems

Access control is the first layer of operational safety. From corridor entry to individual racks, every zone can be managed and monitored and logged in real time.



- Multi-factor authentication with fingerprint, access card, or PIN code.
- Integrated access management for corridors and critical zones.
- Event logging and real-time remote auditing for complete traceability.



- Electronic locks with card or keypad authentication.
- Manual emergency release and LED status indicators for quick diagnostics.
- Fully compatible with ORION Data Center Management.
- Tradicional method with physical (non-eletrical) keys.



- Manages multiple racks and access zones simultaneously.
- Remote authorization and real-time logging of access attempts.
- Modular, scalable architecture designed for future expansion and system growth.



Corridor Access Control



Code	Description	Key Features
82440201001	ORION Biometric Access Module F18 ID/MF	Fingerprint and card-based access control
82440201003	ORION Biometric Access Module 3A MF	Face recognition, fingerprint and card-based access control
82440202001	ORION Card Access Module SC700 ID/MF	Card-based access control
82440203001	ORION Proximity Access Sensor	Presence detection sensor
82440204001	ORION Motion Detection Sensor	Motion detection sensor
82440205001	ORION Safety Beam Sensor	Infrared safety beam detection
82440206001	ORION Corridor Access Button	Manual door release control

Rack Locks



Code	Description	Key Features
82440101001	ORION Cabinet Lock CL3103	Standard electronic lock for single-door applications
82440101005	ORION Cabinet Lock CL3104	Standard electronic lock for double-door applications
82440101002	ORION Cabinet Lock CL311	Card access for single-door applications
82440101003	ORION Cabinet Lock CL312	Card access for double-door applications
82440101004	ORION Cabinet Lock Keypad	Keypad access control module
82440102001	ORION Lock Interface Unit CL1000	Lock interface and integration module

Access Control Modules



Code	Description	Key Features
82440301001	ORION Cabinet Lock Monitoring Module BS-CL1016	Monitoring for up to 16 locks
82440301002	ORION Cabinet Lock Monitoring Module BS-CL1008	Monitoring for up to 8 locks
82440301003	ORION Cabinet Lock Monitoring Module BS-CL1004	Monitoring for up to 4 locks
82440302001	ORION Cabinet Lock Monitoring Module with Sensor Ports BS-CL1016S	Monitoring for up to 16 locks with 3 sensor ports
82440302002	ORION Cabinet Lock Monitoring Module with Sensor Ports BS-CL1008S	Monitoring for up to 8 locks with 3 sensor ports
82440302003	ORION Cabinet Lock Monitoring Module with Sensor Ports BS-CL1004S	Monitoring for up to 4 locks with 3 sensor ports

Environmental Monitoring

The environmental monitoring system operates as a distributed sensor network, delivering real-time data and early anomaly detection across the confined data center environment.

Temperature & Humidity Sensors	Continuous monitoring of thermal and environmental conditions.
	Configurable thresholds with automated alerts for deviations.
Smoke & Water Detection	Early detection of leaks and fire-related risks.
	Triggers local alarms and integrates with alerting systems and roof panels for rapid response.
Door Sensors	Quickly detects rack-door opening/closing.
	Detects physical impacts and unauthorized access attempts.
Data Integration	All environmental data is consolidated within the ORION Data Center Management.
	Custom dashboards and alert rules via email, SMS, call, or SNMP.
	Provides historical records and trend analysis for predictive maintenance.



Sensors



Code	Description	Key Features
82450101001	ORION Temperature & Humidity Sensor BS 2SN	Combined temperature and humidity monitoring
82450102001	ORION Temperature Sensor BS 2S	Temperature monitoring
82450103001	ORION Air Quality Sensor BS 2HK	Air quality monitoring
82450104001	ORION Rope Water Leak Sensor BS SBX	Linear water leak detection cable
82450105001	ORION Spot Water Leak Sensor BS 2SB	Point water leak detection
82450106001	ORION Smoke Detector BS 230R	Smoke detection
82450107001	ORION Vibration Sensor BS VBR	Vibration monitoring
82450108001	ORION Cabinet Door Contact Sensor BS 1011	Door open/close status detection
82450109001	ORION Airflow Sensor BS 2AF	Airflow monitoring
82450110001	ORION IP Camera with Motion Detection BS-CAM	Motion detection and video monitoring

Environmental Monitoring Modules



Code	Description	Key Features
82450201001	ORION Environmental Monitoring Module Single Phase BS 4500	3 sensor ports and 6 dry contact or water leak inputs
82450201002	ORION Environmental Monitoring Module Single Phase BS 6408B	4 sensor ports and 8 dry contact or water leak inputs
82450201003	ORION Environmental Monitoring Module Single Phase BS 6816B	8 sensor ports and 16 dry contact or water leak inputs
82450202001	ORION Environmental Monitoring Module Three Phase BS 6408V	4 sensor ports and 8 dry contact or water leak inputs
82450202002	ORION Environmental Monitoring Module Three Phase BS 6816V	8 sensor ports and 16 dry contact or water leak inputs
82450202003	ORION Environmental Monitoring Module Three Phase BS 61616V	16 sensor ports and 16 dry contact or water leak inputs

Driving sustainability through intelligent monitoring

Energy efficiency is one of today's greatest challenges in data center design and every watt saved reduces both operational costs and environmental impact.

The **PUE (Power Usage Effectiveness)** indicator can only be accurately calculated when the entire infrastructure, including power, IT load, and cooling systems are continuously monitored and correlated.

ORION Data Center Management makes this possible by collecting and analyzing data from all these systems, allowing a complete and accurate view of the facility's energy performance.



Smart Power Distribution

Smart power layer delivers advanced electrical monitoring, control and efficiency across the data center infrastructure.

Power Monitoring	Real-time measurement of voltage, current, and load.
	Per-rack or per-outlet consumption metrics for precise energy management.
Control & Redundancy	Remote switching of individual outlets.
	Overload, power failure and abnormal consumption alerts with instant notifications.
Alerts & Efficiency	Real-time door open/close status monitoring with instant alert notifications.
	Data collected via SNMP into the monitoring interface, enabling performance analysis and energy optimization.



Smart Power Distribution



Code	Description	Type	Number of Sockets	Socket Type	Plug Type	Rated Current (A)
82431108433	ORION Smart Monitor PDU SPDU-H-M-08-US(B)-US(B)-15A	Horizontal	8	US (B)	US (B)	15
82431108111	ORION Smart Monitor PDU SPDU-H-M-08-SCH-SCH-16A			Schuko	Schuko	16
82432116522	ORION Smart Monitor PDU SPDU-V-M-16-UK-IEC309-32A	Vertical	16	UK	IEC 309	32
82432124222	ORION Smart Monitor PDU SPDU-V-M-24-SCH-IEC309-32A		24	Schuko	IEC 309	32
82432124622	ORION Smart Control PDU SPDU-V-M-24-C13x21-C19x3-IEC309-32A		24	21xC13 + 3xC19	IEC 309	32
82431208433	ORION Smart Control PDU SPDU-H-C-08-US(B)-US(B)-15A	Horizontal	8	US (B)	US (B)	15
82431208111	ORION Smart Control PDU SPDU-H-C-08-SCH-SCH-16A			Schuko	Schuko	16
82432216122	ORION Smart Control PDU SPDU-V-C-16-SCH-IEC309-32A	Vertical	16	Schuko	IEC 309	32
82432224222	ORION Smart Control PDU SPDU-V-C-24-C13-IEC309-32A		24	C13	IEC 309	32
82432224622	ORION Smart Control PDU SPDU-V-C-24-C13x21-C19x3-IEC309-32A		24	21xC13 + 3xC19	IEC 309	32

Sensors



Code	Description	Key Features
82433100000	ORION Smart PDU Temperature & Humidity Sensor	Real-time temperature and humidity monitoring, auto-detected by Smart PDU
82433200000	ORION Smart PDU Smoke Sensor	Real-time smoke detection, auto-detected by Smart PDU
82433300000	ORION Smart PDU Water Leakage Sensor	Real-time water leak detection, auto-detected by Smart PDU
82433400000	ORION Smart PDU Door Opening Sensor	Door open/close detection, auto-detected by Smart PDU

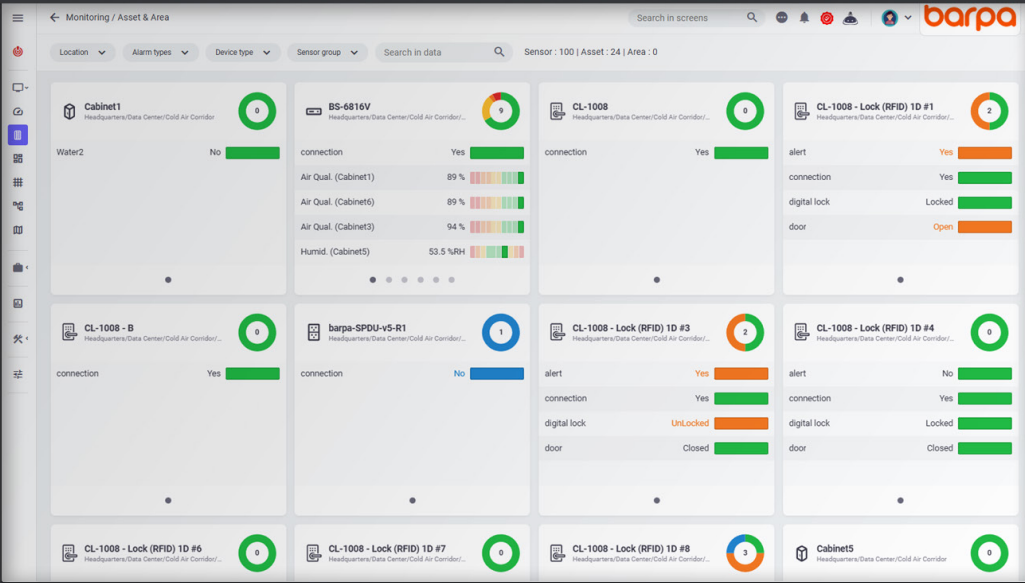
Centralized Monitoring & Control

Our **Orion Data Center Management** is the command center of the entire infrastructure.

It consolidates power, data, environmental sensors, and access control into a single unified interface, delivering total visibility and real-time operational control.

With this platform, every rack, aisle and devices can be visually monitored, from power consumption to environmental conditions and access logs, enabling fast and precise responses to any event or anomaly.

Unified Web Interface	Secure browser-based and mobile access with customizable dashboards and an integrated view of all subsystems.
Real-Time Monitoring	Real-time alarms and status indicators.
	Configurable thresholds and escalation levels.
Alerts & Notifications	Instant alarms via email, calls, SMS, or integrations with external monitoring platforms by SNMP, with configurable severity levels.
Analytics & Reporting	Performance history, automated reports, and trend analysis to support preventive maintenance and capacity planning.
User Management & Audit	Role-Based Access Control (RBAC) with detailed activity logs and end-to-end encrypted communication for maximum security and compliance.



Orion Intelligence Configurations

Discover barpa ORION Intelligence solutions and explore the range of sensors and controllers available to enhance monitoring, control, and security within your infrastructure.

From essential environmental sensing to advanced management capabilities, these solutions adapt to your operational needs.

Contact our team to define the right setup for your project.

Configuration Code	barpa Codes	Description	Quantity
824000100001	82450101001	ORION Temperature & Humidity Sensor B S 2SN	8
	82450106001	ORION Smoke Detector BS 230R	2
	82450201003	ORION Environmental Monitoring Module Single Phase BS 6816B	1
	ODCM – Essential Package		1
	Active Devices Limit: 25		
	Centralized monitoring and management software with real-time visibility, alerts and user access control.		
	<u>Included Add-On Licenses</u> 1x Customizable Dashboard 1x 2D Monitoring & Visualization 5x NetCheck Network Device Tracking 3x 3rd-Party Equipment Monitoring 1x Super Sensor”		

Orion Intelligence Configurations

Discover barpa ORION Intelligence solutions and explore the range of sensors and controllers available to enhance monitoring, control, and security within your infrastructure.

From essential environmental sensing to advanced management capabilities, these solutions adapt to your operational needs.

Contact our team to define the right setup for your project.

Orion Intelligence Configuration 02

Configuration Code	Included Codes	Description	Quantity
824000100002	82450101001	ORION Temperature & Humidity Sensor BS 2SN	16
	82450103001	ORION Air Quality Sensor BS 2HK	16
	82450202003	ORION Environmental Monitoring Module Three Phase BS 61616V	2
	82450106001	ORION Smoke Detector BS 230R	2
	82450110001	ORION IP Camera with Motion Detection BS-CAM	2
	ODCM – Pro Package		
	Active Device Limit: 200		
	Advanced monitoring and control with enhanced automation, alarm management and configurable data acquisition.		
	<u>Included Add-On Licenses</u>		
	5x Customizable Dashboard 5x 2D Monitoring & Visualization 10x NetCheck Network Device Tracking 10x 3rd-Party Equipment Monitoring 10x Super Sensor 3x Rack-Based Inventory Monitoring		
Support packages for 3rd-Party and Inventory licenses not included in the first year.			

Orion Intelligence Configurations

Discover barpa ORION Intelligence solutions and explore the range of sensors and controllers available to enhance monitoring, control, and security within your infrastructure.

From essential environmental sensing to advanced management capabilities, these solutions adapt to your operational needs.

Contact our team to define the right setup for your project.

Orion Intelligence Configuration 03

Configuration Code	Included Codes	Description	Quantity
824000100003	82450101001	ORION Temperature & Humidity Sensor BS 2SN	16
	82450201003	ORION Environmental Monitoring Module Single Phase BS 6816B	2
	82450106001	ORION Smoke Detector BS 230R	2
	82450110001	ORION IP Camera with Motion Detection BS-CAM	2
	ODCM – Pro Package		
	Active Device Limit: 200		
	Advanced monitoring and control with enhanced automation, alarm management and configurable data acquisition.		
	<u>Included Add-On Licenses</u>		1
	5x Customizable Dashboard 5x 2D Monitoring & Visualization 10x NetCheck Network Device Tracking 10x 3rd-Party Equipment Monitoring 10x Super Sensor 3x Rack-Based Inventory Monitoring		
	Support packages for 3rd-Party and Inventory licenses not included in the first year.		

Orion Intelligence Configurations

Discover barpa ORION Intelligence solutions and explore the range of sensors and controllers available to enhance monitoring, control, and security within your infrastructure.

From essential environmental sensing to advanced management capabilities, these solutions adapt to your operational needs.

Contact our team to define the right setup for your project.

Orion Intelligence Configuration 04

Configuration Code	Included Codes	Description	Quantity
824000100004	82450101001	ORION Temperature & Humidity Sensor BS 2SN	16
	82450103001	ORION Air Quality Sensor BS 2HK	16
	82450202003	ORION Environmental Monitoring Module Three Phase BS 61616V	2
	82450106001	ORION Smoke Detector BS 230R	2
	82450110001	ORION IP Camera with Motion Detection BS-CAM	2
	ODCM – Corporate Package		
	Active Device Limit: Unlimited		
	Full-scale monitoring and management solution with maximum scalability, redundancy and enterprise-level control.		
	<u>Included Add-On Licenses</u>		
	Unlimited Customizable Dashboard Unlimited 2D Monitoring & Visualization 20x NetCheck Network Device Tracking 50x 3rd-Party Equipment Monitoring Unlimited Super Sensor 10x Rack-Based Inventory Monitoring		
Support packages for 3rd-Party and Inventory licenses not included in the first year.			

Orion Structure Configurations

Discover barpa ORION solutions and explore possible data center configurations, designed to help you visualize how your project can be built and which components can be included.

From essential setups to more advanced solutions, our portfolio adapts to your needs. **Contact our team to design the ideal configuration for your project.**



Orion Structure Single Row Configuration 01

1 / 3

Configuration Code	Included Codes	Description	Quantity
824000200001	82410001000	ORION Rack - 42U 800x1200mm	8
	82420000010	ORION Fixed Roof - 800x1200mm	8
	82420100000	ORION 42U Single Sliding Manual Corridor Doors	1
	82420140100	ORION 42U Corridor End Closure Plexiglass	1



Orion Structure Double Row Configuration 02

Configuration Code	Included Codes	Description	Quantity
824000200002	82410001000	ORION Rack - 42U 800x1200mm	8
	82410000000	ORION Rack - 42U 600x1200mm	8
	82420130000	ORION 42U Double Sliding Automatic Corridor Doors	2
	82420000010	ORION Fixed Roof - 800x1200mm	4
	82420010001	ORION Opening Roof - 600x1210mm	4

Orion Structure Configurations

Discover barpa ORION solutions and explore possible data center configurations, designed to help you visualize how your project can be built and which components can be included.

From essential setups to more advanced solutions, our portfolio adapts to your needs. **Contact our team to design the ideal configuration for your project.**



Orion Structure Double Row Configuration 03

2 / 3

Configuration Code	Included Codes	Description	Quantity
824000200003	82410001000	ORION Rack - 42U 800x1200mm	4
	82410000000	ORION Rack - 42U 600x1200mm	4
	82420130000	ORION 42U Double Sliding Automatic Corridor Doors	2
	82420000010	ORION Fixed Roof - 800x1200mm	2
	82420000000	ORION Fixed Roof - 600x1200mm	2
	82440301001	ORION Cabinet Lock Monitoring Module BS-CL1016	1
	82440102001	ORION Lock Interface Unit CL1000	8
	82450108001	ORION Cabinet Door Contact Sensor BS 1011	16
	82450101001	ORION Temperature & Humidity Sensor BS 2SN	8
	82450106001	ORION Smoke Detector BS 230R	1
	82440101002	ORION Cabinet Lock CL311	8
	82440101003	ORION Cabinet Lock CL312	8
	82450110001	ORION IP Camera with Motion Detection BS-CAM	2
	82440201001	ORION Biometric Access Module F18 ID/MF	2
	82450201003	ORION Environmental Monitoring Module Single Phase BS 6816B	1
ODCM – Essential Package			
Active Device Limit: 25			
Centralized monitoring and management software with real-time visibility, alerts and user access control			
Included Add-On Licenses			1
1x Customizable Dashboard			
1x 2D Monitoring & Visualization			
5x NetCheck Network Device Tracking			
3x 3rd-Party Equipment Monitoring			
1x Super Sensor			

Orion Structure Configurations

Discover barpa ORION solutions and explore possible data center configurations, designed to help you visualize how your project can be built and which components can be included.

From essential setups to more advanced solutions, our portfolio adapts to your needs. **Contact our team to design the ideal configuration for your project.**



Orion Structure Double Row Configuration 04

3 / 3

Configuration Code	Included Codes	Description	Quantity
824000200004	82410011000	ORION Rack - 47U 800x1200mm	16
	82420130001	ORION 47U Double Sliding Automatic Corridor Doors	2
	82420000010	ORION Fixed Roof - 800x1200mm	8
	82440301001	ORION Cabinet Lock Monitoring Module BS-CL1016	2
	82440102001	ORION Lock Interface Unit CL1000	16
	82450108001	ORION Cabinet Door Contact Sensor BS 1011	32
	82450101001	ORION Temperature & Humidity Sensor BS 2SN	16
	82450106001	ORION Smoke Detector BS 230R	1
	82440101002	ORION Cabinet Lock CL311	16
	82440101003	ORION Cabinet Lock CL312	16
	82450110001	ORION IP Camera with Motion Detection BS-CAM	2
	82450103001	ORION Air Quality Sensor BS 2HK	16
	82450202003	ORION Environmental Monitoring Module Three Phase BS 61616V	2
	ODCM – Corporate Package		
Active Device Limit: Unlimited			
Full-scale monitoring and management solution with maximum scalability, redundancy and enterprise-level control			
Included Add-On Licenses			1
Unlimited Customizable Dashboard			
Unlimited 2D Monitoring & Visualization			
20x NetCheck Network Device Tracking			
50x 3rd-Party Equipment Monitoring			
Unlimited Super Sensor			
10x Rack-Based Inventory Monitoring			
Support packages for 3rd-Party and Inventory licenses not included in the first year.			

Orion Data Center Management Licenses

ODCM is a centralized software for monitoring and managing your data center infrastructure, delivering real-time visibility, alerts and control.

Through flexible licensing, you can expand functionalities according to your needs, ensuring scalability as your infrastructure evolves.

Explore more about the different types of licenses available.

Description	Essential	Pro	Corporate
Customizable dashboard	1	5	Unlimited
2D Visualization and Monitoring	1	5	Unlimited
Netcheck	5	10	20
Super sensor	1	10	Unlimited
Third-party device monitoring	3	10	20
Energy cost for devices (requires license for third-party devices)	x	10	20
Rack Tracking	x	3	10
Mobile app and advanced management	✓	✓	✓
Personalization of notifications	✓	✓	✓
Advanced alarm rules	x	✓	✓
Sending notifications based on working hours	x	✓	✓
Area/Location based alarms	x	✓	✓
Decrease in the frequency of notifications over time (smart notifications)	x	✓	✓
Authorization to access areas and racks according to the user's working hours	x	✓	✓
2D heatmap	x	✓	✓
Energy and PUE costs (coming soon)	x	✓	✓
Reading frequency customization and data logging	x	✓	✓
LDAP Integration	x	✓	✓
Identification of multiple companies and groups	x	✓	✓
Defining multiple notification services	x	✓	✓
Distributed execution of software on different servers	x	x	✓
Software redundancy (failover and disaster recovery)	x	x	✓

Expansion Packages Netcheck and Third-party devices 20 units | 50 units | 100 units

ORION

Connectivity

Everything that
connects your
equipment.

Connectivity is the layer that brings a data center to life.
It ensures communication between systems, maintains stability,
and supports the ever-growing need for speed and capacity.

With years of experience in structured cabling, barpa integrates
its fiber and copper solutions into **ORION Connectivity**.

Explore barpa's range of connectivity solutions designed to enhance data center
performance and reliability.



SAGITTA

Ultra High-Density Solution

Sagitta represents barpa’s expertise in ultra high-density fiber systems, developed to maximize space and performance in data center environments.

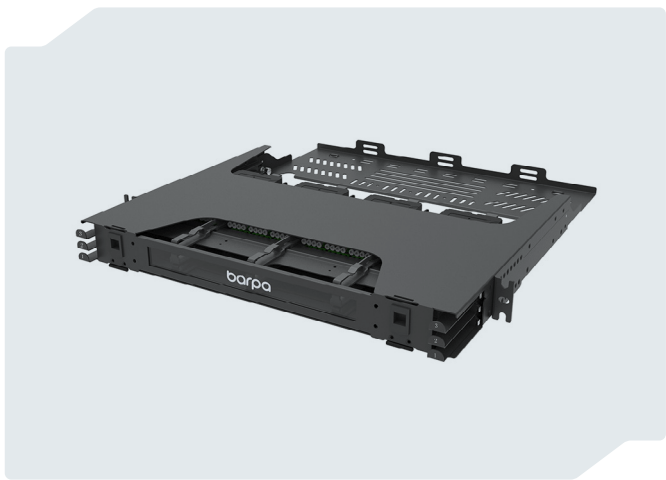
Based on **MPO/MTP® technology** for compact, fast deployment

Supports up to **144F, 288F and 576F** in **1U, 2U and 4U**

Designed for **clean installation**, easy scalability, and reliable operation

[Click here to know more about this solution](#)

barpa.eu/markets/data-center/sagitta



Ultra High Density Patch Panel

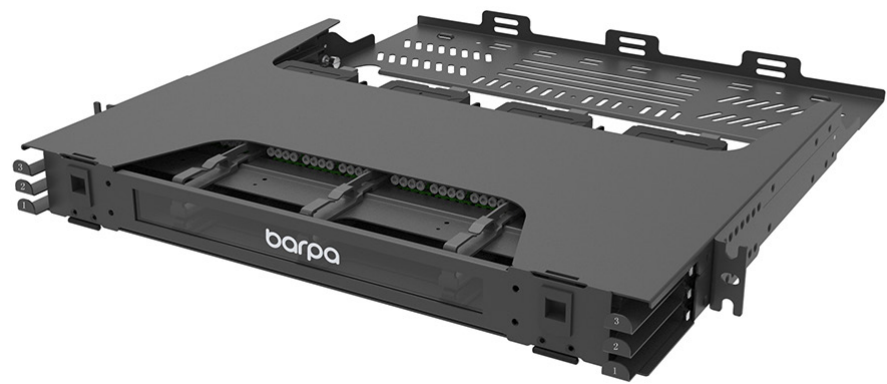


Ultra High Density Cassettes



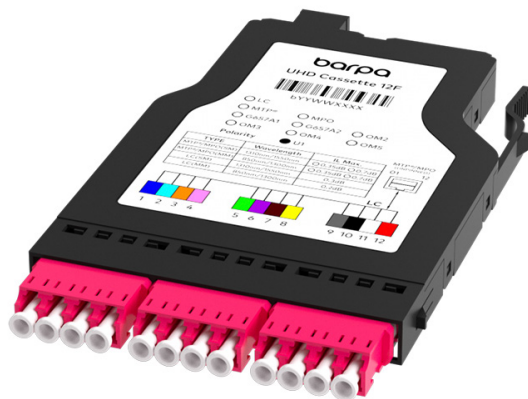
Uniboosts

UHD Patch Panel Sagitta



Code	Description	Dimensions (mm)	Key Features
81504010100	Empty Fiber Optic UHD Patch Panel 1U Sagitta	483×350×45	Capacity for 144F MPO/MTP®-LC
81504010200	Empty Fiber Optic UHD Patch Panel 2U Sagitta	483×350×89	Capacity for 288F MPO/MTP®-LC
81504010400	Empty Fiber Optic UHD Patch Panel 4U Sagitta	483×350×178	Capacity for 576F MPO/MTP®-LC

UHD Cassettes



Code	Description	Type	Dimensions (mm)
81504081012	UHD Cassette MTP®-LC 8F G657A1 Polarity B Sagitta	8 Fibers	60x105x12
81504082012	UHD Cassette MTP®-LC 8F OM3 Polarity B Sagitta		
81504083012	UHD Cassette MTP®-LC 8F OM4 Polarity B Sagitta		
81504084012	UHD Cassette MTP®-LC 8F OM5 Polarity B Sagitta		
81504121011	UHD Cassette MTP®-LC 12F G657A1 Polarity U1 Sagitta	12 Fibers	90x130x12
81504122011	UHD Cassette MTP®-LC 12F OM3 Polarity U1 Sagitta		
81504123011	UHD Cassette MTP®-LC 12F OM4 Polarity U1 Sagitta		
81504124011	UHD Cassette MTP®-LC 12F OM5 Polarity U1 Sagitta		
81504121030	Splice Cassette with 12 LC OS2 Adapters Sagitta		
81504122030	Splice Cassette with 12 LC OM3 Adapters Sagitta		
81504123030	Splice Cassette with 12 LC OM4 Adapters Sagitta		
81504124030	Splice Cassette with 12 LC OM5 Adapters Sagitta		

HYDRA

OM5 Fiber Solution

Built for modern data centers, Hydra provides the bandwidth and clarity required for demanding applications with OM5 fiber.

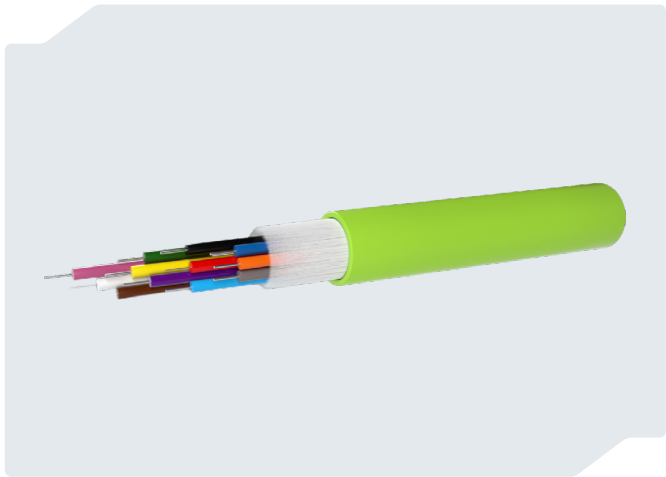
Up to 400 Gbps transmission capacity

Optimized for **SWDM** and **high-speed backbones**

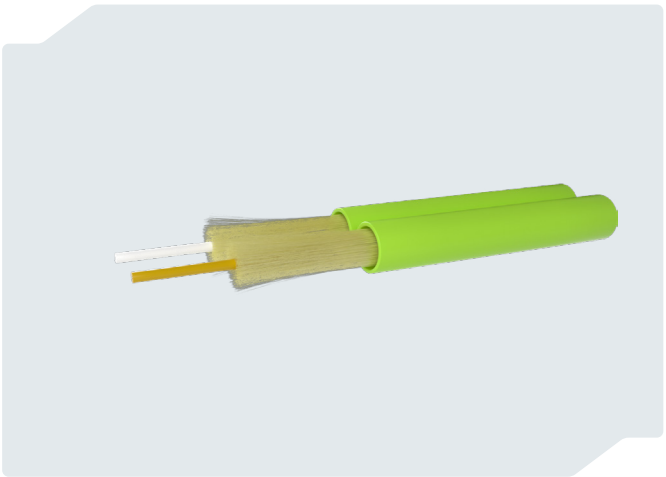
Complete range of cables, adapters, and pre-terminated assemblies

[Click here to know more about this solution](#)

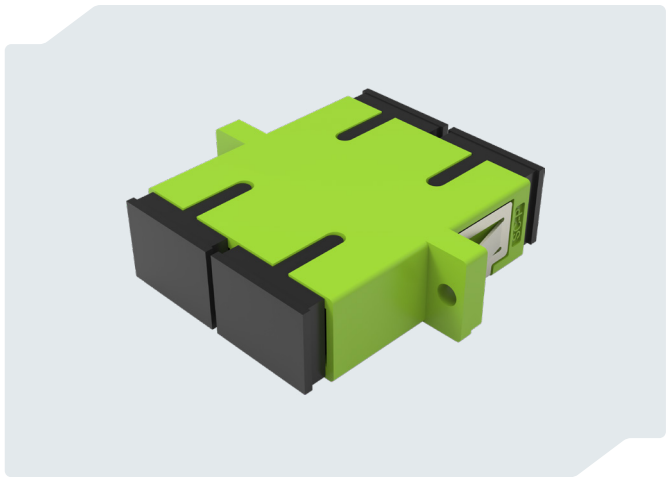
barpa.eu/markets/data-center/hydra



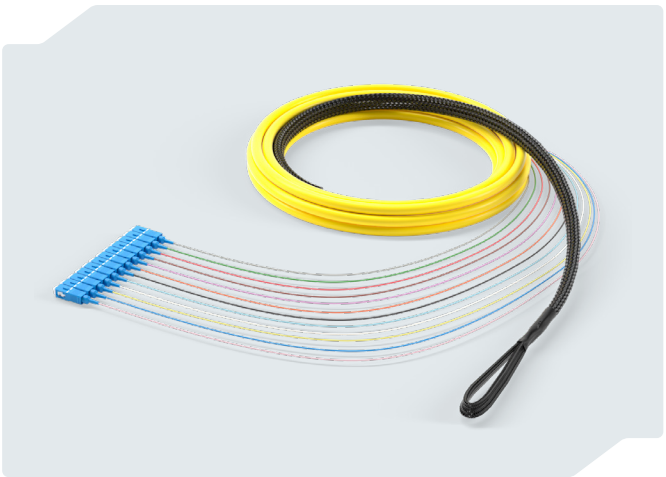
Distribution Cable



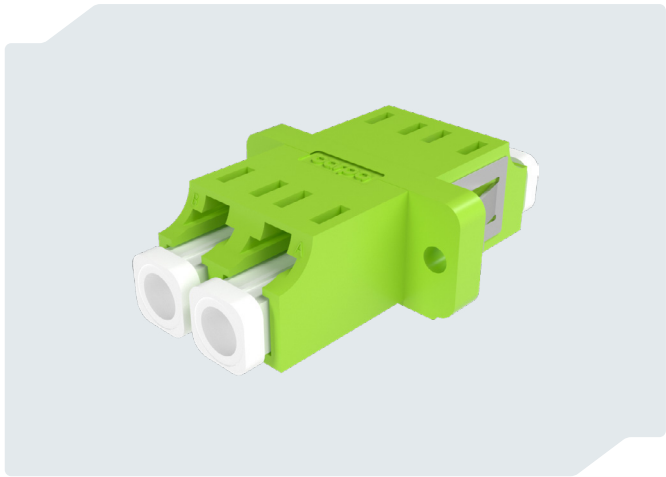
Zip-Cord Cable



SC Adapter

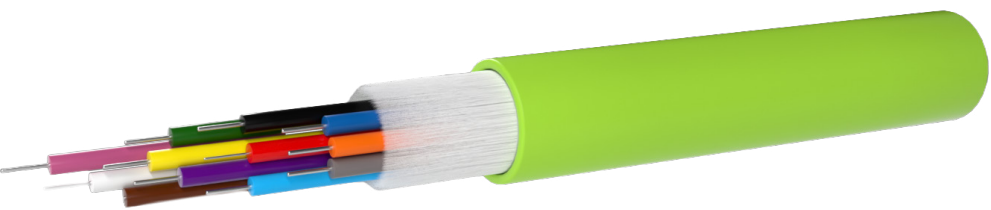


Pre-Terminated
Fiber Trunk Cable



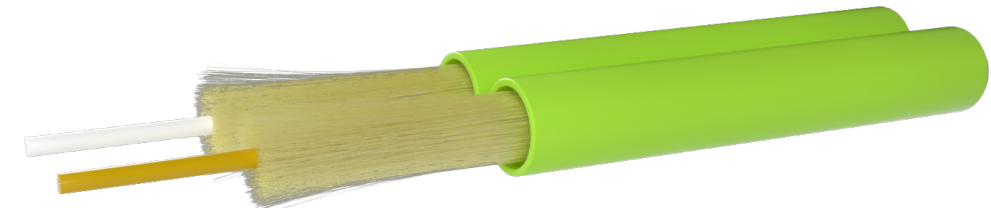
LC Adapter

Distribution Cable



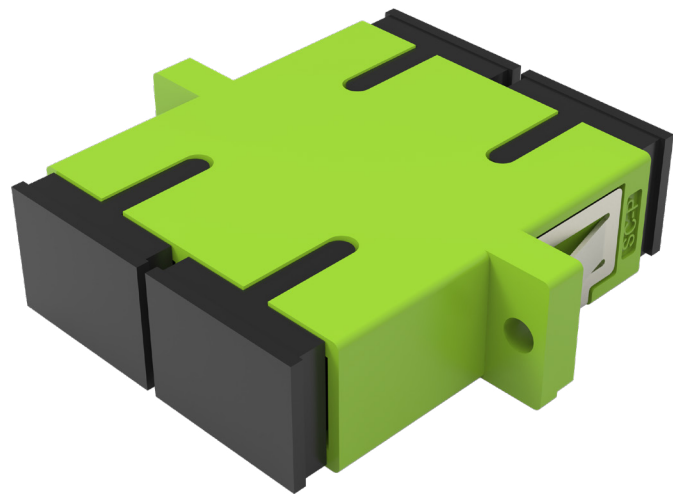
	2	4	8	12	24
CPR Cca Class					
OS2 G652D	81112124102C1	81112124104C1	81112124108C1	81112124112C1	81112124124C1
OS2 G657A2	81112124202C1	81112124204C1	81112124208C1	81112124212C1	81112124224C1
OM3	81114124502C1	81114124504C1	81114124508C1	81114124512C1	81114124524C1
OM4	81115124602C1	81115124604C1	81115124608C1	81115124612C1	81115124624C1
CPR B2ca Class					
OS2 G652D	81112101102B1	81112101104B1	81112101108B1	81112101112B1	81112101124B1
OS2 G657A2	81112101202B1	81112101204B1	81112101208B1	81112101212B1	81112101224B1
OM3	81114101502B1	81114101504B1	81114101508B1	81114101512B1	81114101524B1
OM4	81115101602B1	81115101604B1	81115101608B1	81115101612B1	81115101624B1
OM5	81117101702B1	81117101704B1	81117101708B1	81117101712B1	81117101724B1

Zip-Cord Cable



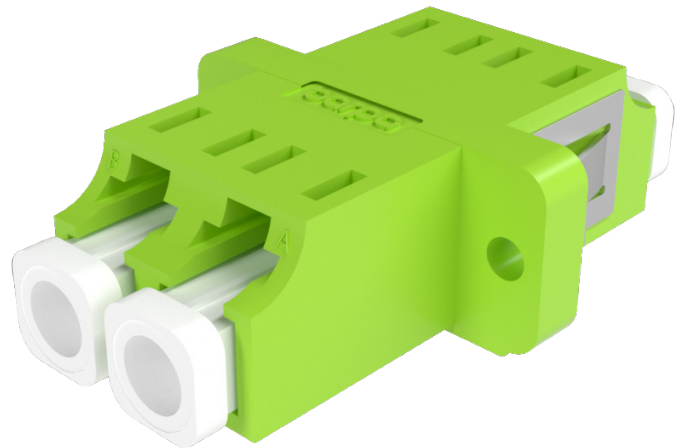
Cable Diameter (mm)	Number of Fibers	OM2	OM3	OM4	OM5	OS2 G652D	OS2 G657A2	OS2 G657B3
2	1	-	-	-	-	81112102101	81112102201	81112102301
	2	81113102402	81114102502	81115102602	81117102702	81112102102	81112102202	81112102302
3	1	-	-	-	-	81112103101	81112103201	81112103301
	2	81113103402	81114103502	81115103602	81117103702	81112103102	81112103202	81112103302

SC Adapter



Code	Description	Connector	Category	Type	Color
81411021041	Adapter OS2 SC Simplex with Flange Snap-In	SC	OS2	Simplex	Blue
81410213011	Adapter OM2 SC Simplex with Flange Snap-In	SC	OM2	Simplex	Gray
81411024031	Adapter OM3 SC Simplex with Flange Snap-In	SC	OM3	Simplex	Aqua
81411025061	Adapter OM4 SC Simplex with Flange Snap-In	SC	OM4	Simplex	Purple
81411026070	Adapter OM5 SC Simplex with Flange Snap-In	SC	OM5	Simplex	Lime Green
81411011051	Adapter OS2 SC/APC Simplex with Flange Snap-In	SC/APC	OS2	Simplex	Green
81411091051	Adapter OS2 SC/APC Simplex with Cover	SC/APC	OS2	Simplex	Green
81411111051	Adapter OS2 SC/APC Simplex with Cover without Flange	SC/APC	OS2	Simplex	Green
81412121041	Adapter OS2 SC Duplex without Flange Snap-In	SC	OS2	Duplex	Blue
81412021041	Adapter OS2 SC Duplex with Flange Snap-In	SC	OS2	Duplex	Blue
81412023011	Adapter OM2 SC Duplex with Flange Snap-In	SC	OM2	Duplex	Gray
81412024031	Adapter OM3 SC Duplex with Flange Snap-In	SC	OM3	Duplex	Aqua
81412025061	Adapter OM4 SC Duplex with Flange Snap-In	SC	OM4	Duplex	Purple
81412026070	Adapter OM5 SC Duplex with Flange Snap-In	SC	OM5	Duplex	Lime Green
81412011051	Adapter OS2 SC/APC Duplex with Flange Snap-In	SC/APC	OS2	Duplex	Green
81412091051	Adapter OS2 SC/APC Duplex with Cover	SC/APC	OS2	Duplex	Green
81412131051	Adapter OS2 SC/APC Duplex without Flange Snap-In	SC/APC	OS2	Duplex	Green

LC Adapter



Code	Description	Connector	Category	Type	Color
81412041051	Adapter OS2 LC/APC Duplex with Flange Snap-In	LC/APC	OS2	Duplex	Green
81412051041	Adapter OS2 LC Duplex with Flange Snap-In	LC	OS2	Duplex	Blue
81412053011	Adapter OM2 LC Duplex with Flange Snap-In	LC	OM2	Duplex	Grey
81412054031	Adapter OM3 LC Duplex with Flange Snap-In	LC	OM3	Duplex	Aqua
81412055061	Adapter OM4 LC Duplex with Flange Snap-In	LC	OM4	Duplex	Purple
81412056070	Adapter OM5 LC Duplex with Flange Snap-In	LC	OM5	Duplex	Lime Green
81413053011	Adapter OM2 LC Quadruplex with Flange Snap-In	LC	OM2	Quadruplex	Grey
81413054031	Adapter OM3 LC Quadruplex with Flange Snap-In	LC	OM3	Quadruplex	Aqua
81413055061	Adapter OM4 LC Quadruplex with Flange Snap-In	LC	OM4	Quadruplex	Purple
81413056070	Adapter OM5 LC Quadruplex with Flange Snap-In	LC	OM5	Quadruplex	Lime Green

DRACO

Cat.8 Solution

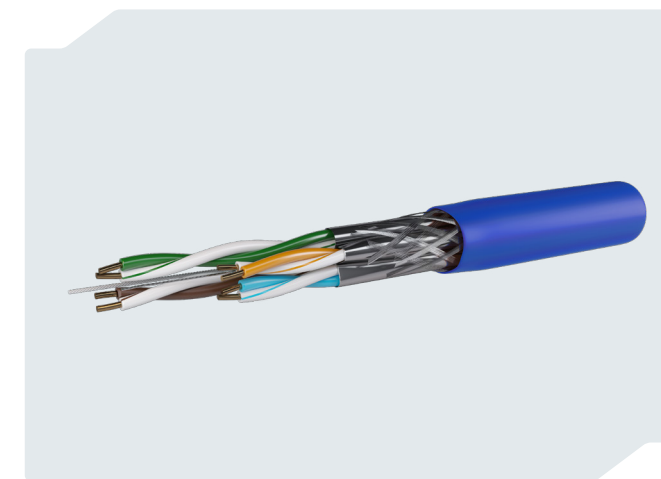
For installations where copper remains essential, Draco ensures robust, high-speed connectivity. Engineered for up to 40 Gbps and 2000 MHz, Cat. 8 Solution provides strength and stability for critical short-distance links.

Advanced shielding against **EMI interference**

Complete range: Cables, Keystones, Field Plugs and Patch Cords

[Click here to know more about this solution](#)

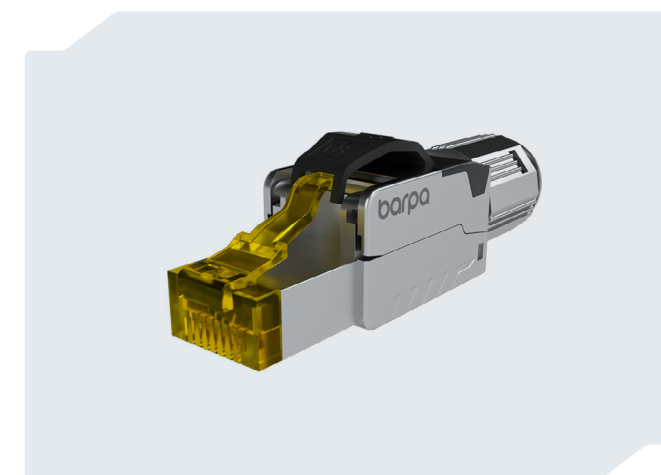
barpa.eu/markets/data-center/draco



Cable Cat.8.1 S/FTP
LSZH - 22 AWG



Patch Cord
Cat.8.1 S/FTP



Field Term Plug RJ45
Cat.8.1 - STP



Keystone Jack
Cat.8.1 - STP Toolless

Cable Cat.8.1 S/FTP LSZH - 22 AWG



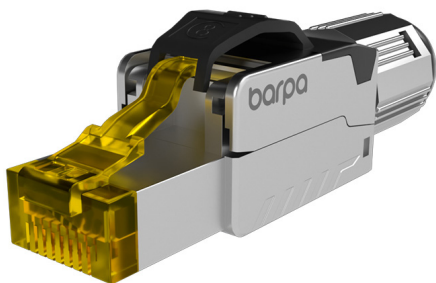
Code	Type of package	Size (mm)	Gross Weight (kg)	Net Weight (kg)	Quantity (m)	CPR Class
82226427030B2	Reel	400x400x300	25	23	305	B2ca-s1a,d0,a1

Patch Cord Cat.8.1 S/FTP



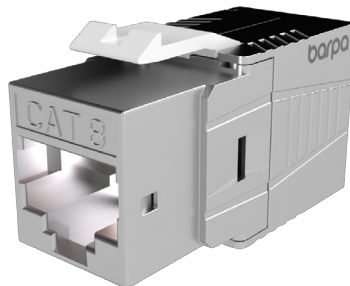
Code	Length (m)	Applications
82216423010	1	Ethernet 25GBASE-T, 40GBASE-T, ideal for high density server rooms or data centers
82216423020	2	
82216423030	3	

Field Term Plug RJ45 Cat.8.1 - STP



Code	Key Features
82246122180	40G performance Hardened shielding Reduced interference Pre-assembled protective cap

Keystone Jack Cat.8.1 - STP Toolless



Code	Key Features
82246322000-1	40G performance Easy termination Low attenuation and high return loss

HIGGS INTERNAL
PRODUCTION
UNIT

Pre-Assembled Solutions

barpa designs and manufactures pre-terminated fiber and copper systems in-house, supporting data center projects from the network design stage through implementation.

These customized assemblies simplify deployment, reduce installation times, and guarantee tested performance.

Pre-terminated fiber trunks and breakout assemblies

Pre-assembled copper trunks (Cat.6A to Cat.8)

Designed and produced according to project-specific requirements

Fully **tested**, traceable and compliant with international standards

Click here to know more about this solution

barpa.eu/solutions/



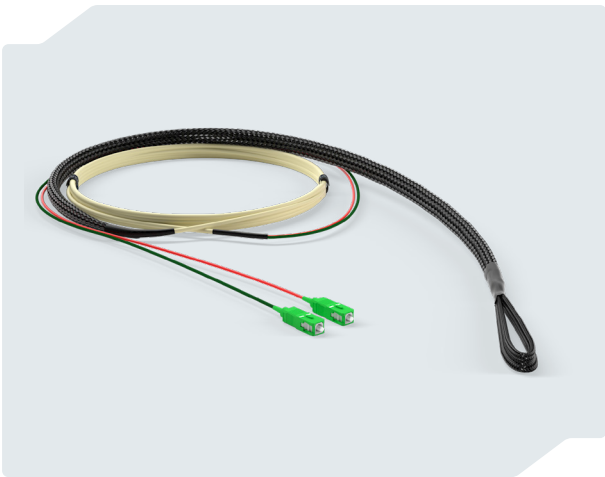
FO
Trunk Cables



MPO
Trunk Cables



Uniboosts



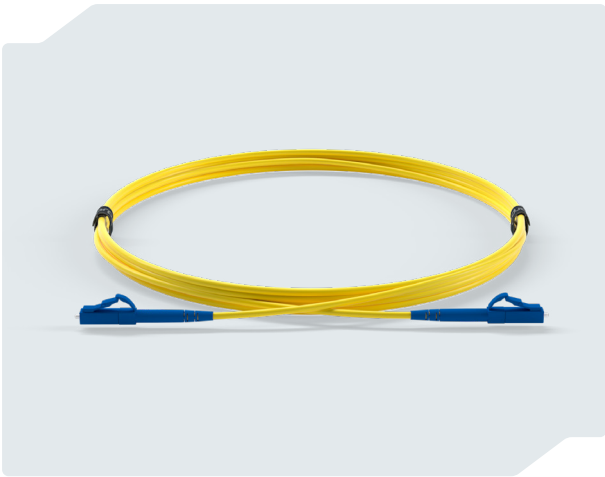
FO
Breakout Cables



MPO
Breakout Cables



Copper
Patch Cables



FO
Patch Cords

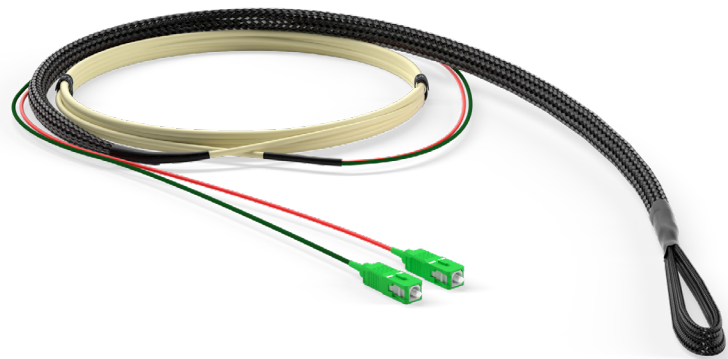
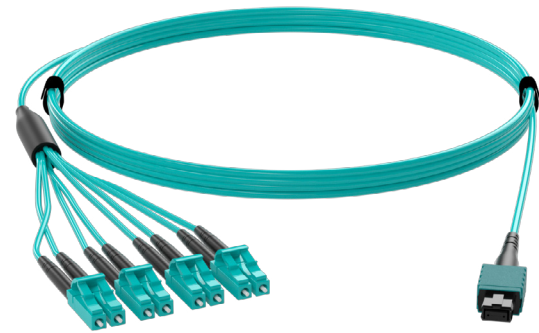
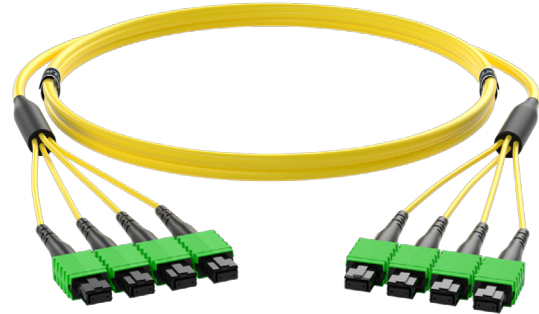


MPO
Patch Cords



Copper
Trunk Cables

Fiber Optic Trunk Cables



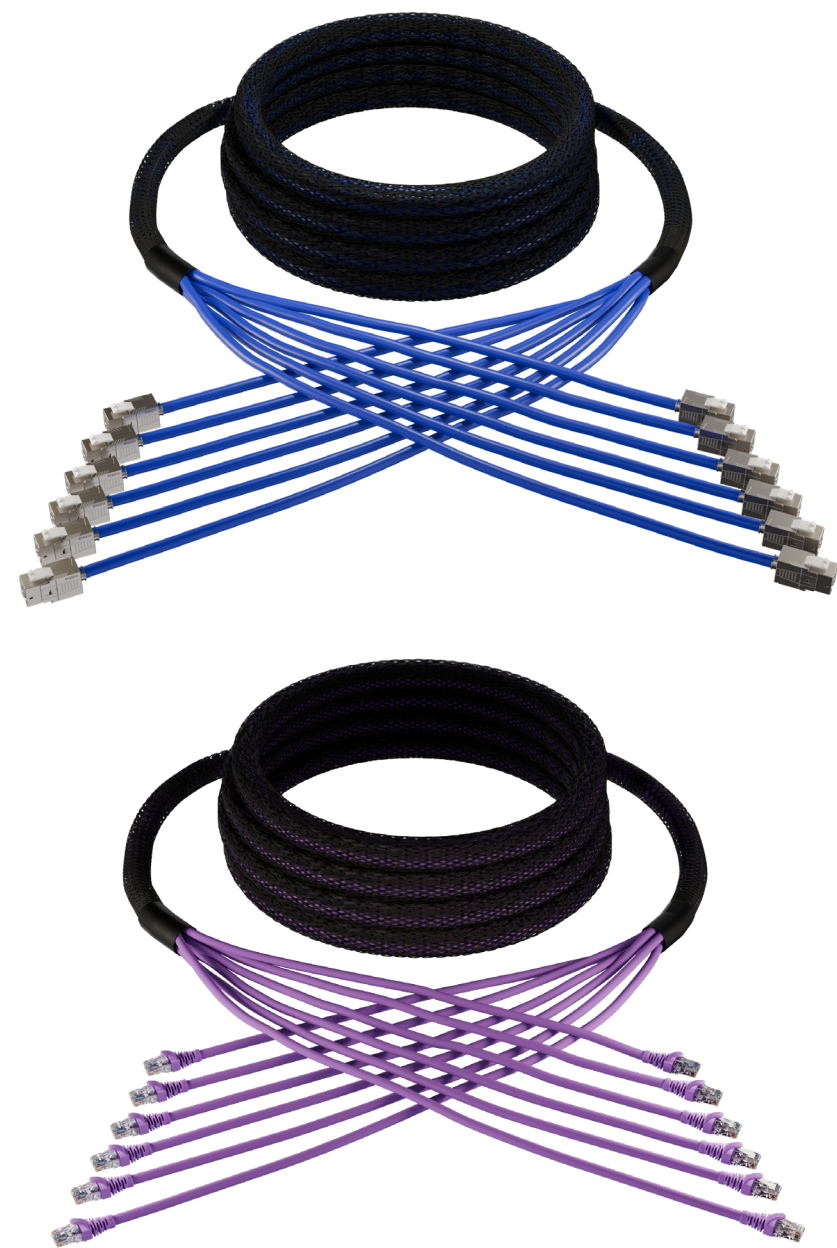
Category	Cable Type	CPR (in case of LSZH jacket)	Number of Fibers	Conector A	Conector B	Type of Fanout (in case of Unitube cable)	Type of Pulling Eye	Pulling Eye Ends	Length
OS2 G652D	Distribution Tight Buffer	Eca	2	SC	SC	0,9mm	IP68	Both Ends	10 - 1000 meters
OS2 G657A2	Unitube PE Loose Tube	Dca	4	SC/APC	SC/APC	2mm	IP10 (expandable sleeve)	One end	
OS2 G657B3	Unitube LSZH Loose Tube	Cca	6	LC	LC	3mm	None		
OM2	Drop Tight Buffer	B2ca	8	LC/APC	LC/APC				
OM3	Cable for MPO Loose Tube		12	LC Uniboot	LC Uniboot				
OM4			24	MTP® PRO Female	MTP® PRO Female				
OM5				MTP® PRO Male	MTP® PRO Male				
				MTP® PRO APC Female	MTP® PRO APC Female				
				MTP® PRO APC Male	MTP® PRO APC Male				
					None				
For assistance customizing the cable you need, please contact tech support									

Copper Patch Cables



Configuration	Cable Types	CPR Classes	Connectors
Keystone Jack + Keystone Jack	Cat.8.1 S/FTP	B2ca	Cat.8.1 STP Keystone Jack
Keystone Jack + Field Plug	Cat.7A S/FTP	Cca	Cat.6A STP Keystone Jack
Field Plug + Field Plug	Cat.7 S/FTP	Dca	Cat.6 STP Keystone Jack
Modular Plug + Modular Plug	Cat.6A S/FTP		Cat.6A UTP Keystone Jack
Keystone Jack + Modular Plug	Cat.6A U/FTP		Cat.6 UTP Keystone Jack
	Cat.6 U/FTP		Cat.8.1 STP Field Plug
	Cat.6A U/UTP Extreme		Cat.6A STP Field Plug
	Cat.6 U/UTP		Cat.6A STP Modular Plug
			Cat.6A UTP Modular Plug
For assistance customizing the cable you need, please contact tech support			

Copper Trunk Cables



Configuration	Cable Types	CPR Classes	Connectors
Keystone Jack + Keystone Jack	Cat.8.1 S/FTP	B2ca	Cat.8.1 STP Keystone Jack
Modular Plug + Modular Plug	Cat.7A S/FTP	Cca	Cat.6A STP Keystone Jack
	Cat.7 S/FTP	Dca	Cat.6 STP Keystone Jack
	Cat.6A S/FTP		Cat.6A UTP Keystone Jack
	Cat.6A U/FTP		Cat.6 UTP Keystone Jack
	Cat.6 U/FTP		Cat.6A STP Modular Plug
	Cat.6A U/UTP Extreme		Cat.6A UTP Modular Plug
	Cat.6 U/UTP		
For assistance customizing the cable you need, please contact tech support			

ORION was created to ensure that every element, from mechanical containment to fiber systems and ORION Data Center Management, works together seamlessly, delivering performance, security, and sustainability.

Our solutions are developed in alignment with the most recognized international data center standards, including ANSI/TIA-942, EN 50600, and ISO/IEC 30134 for energy efficiency and operational excellence.

These frameworks guide our engineering principles, ensuring reliability, traceability, and compliance across every project.

With **ORION**, we help you build infrastructures that are secure by design, efficient by operation, and sustainable by purpose.

We believe the future of data centers is not just about capacity.

It's about intelligence, responsibility, and trust.

Designed for Trust, Built for Excellence

Confined Data Center Training Program

barpa's Data Center Training Program was developed to train technicians in installation, configuration, and maintenance of complete Data Center solutions.

The program is composed of a theoretical foundation, followed by a set of progressive practical modules, allowing participants to acquire technical skills according to the complexity level of each project.

Each stage includes installation training, practical demonstrations, and individual certification, ensuring that participants master the installation and configuration procedures of barpa systems.

Module 1

Rack and Confined Structure Installation Training.

Module 2

Sensors and PDU Installation Training.

Module 3

Software Installation and Configuration Training.

Contact our team for additional information.

WARRANTY & SUPPORT PROGRAM

To ensure reliability throughout the entire lifecycle of every **ORION** deployment, barpa provides a structured warranty and support framework.

This overview consolidates all components included in each segment of the **ORION** solution, along with the corresponding warranty periods and the support model **delivered** in collaboration with our certified Data Center Integrators.

	ORION STRUCTURE	ORION INTELLIGENCE HARDWARE	ORION INTELLIGENCE SOFTWARE	CONNECTIVITY
Included Components	Racks	Locks	ORION Data Center Management	All the products included in 25-Year Warranty Program
	Accessories	Access Control Sensors & Modules		
	Corridor Doors - Components & Sensors	Environmental Sensors & Modules		
	Roof Panels	Cameras		
	Cable Trays	Smart PDUs & Sensors		
Warranty	2 years	2 years	1 year (software updates included)	2 years
	25-Year Warranty Program (certified components)			
Support	Support is provided in collaboration with the Data Center Integrator, who ensures the first line of diagnostics and on-site verification.			
	barpa acts as advanced technical support (Tier 2), validating diagnostics and providing expert guidance whenever required.			
	SLA response times are defined according to component type, installed solution, and geographic logistics of the project.			
	Replacement parts follow contracted timelines, ensuring availability within the agreed periods*			
	ORION Data Center Management: software updates included for a defined period, plus remote assistance for configuration validation and system checks.			
	Service conditions, SLA response times and associated service fees are formalized in the final project agreement, according to the selected support package.			
	*SLAs represent contracted response times. Spare-part replacements may incur costs according to the predefined price list.			

Headquarters

Rua Noé Pereira, 473
4510-706 Gondomar, Portugal

barpa iberica

Rda. de Pte., 14, piso 2,
28760 Tres Cantos, Madrid
Spain

info@barpa.eu
www.barpa.eu



ORION

barpa