Company brochure 2023/24







Welcome

Solarport is leading the way in engineering a sustainable future, catering to utility, commercial, and domestic-scale energy generation. With a wealth of expertise in both engineering and solar energy, we specialise in next-generation PV and battery mounting systems tailored for every application.

Designed and manufactured in the UK, our innovative solutions are actively shaping the renewable energy landscape.

Become a part of our journey towards a more sustainable future, adaptable to all scales and sectors.

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Bridging supply and demand for a sustainable future

Solarport is a place where engineering ingenuity meets renewable initiative. If you're here, you already believe that the future of clean energy is within reach, thanks to expert engineering and design.

One of the main roadblocks to the global dissemination of solar power is fundamentally an engineering challenge, intricately linked to the supply chain. Recognising this, we've harnessed our extensive experience in both the solar industry and advanced engineering to create solutions that dismantle these barriers.

Our mission is simple: to make renewable energy systems that are not only cost-effective but also easy to install and operate. It's a mission that begins and ends with engineering excellence.

Our global initiatives are focused on implementing robust systems and establishing state-of-the-art facilities. This serves to support the renewable energy revolution while fortifying the supply chain that developers and installers rely on.

It's our comprehensive understanding of engineering principles and solar technology that sets us apart. With a rich heritage in design and engineering expertise, we're engineering forward-thinking solutions that will benefit the renewable energy sector for generations to come.

We are more than suppliers; we are engineers and designers who solve real-world problems, making the renewable energy landscape as efficient and reliable as possible.



David Tattershall Managing Director since 2015

David Tattershall Managing Director

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For experienced or first time solar developers, EPC's and installers, Solarport is a one-stop shop for solar and BESS mounting systems

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About Solarport

Founded in 2015 by a team of engineers, solar installers, and construction professionals, Solarport has rapidly become the UK's leading designer and manufacturer of solar and BESS mounting systems.

With a collective experience spanning decades, our in-depth expertise in engineering, manufacturing, and the solar industry uniquely positions us to deliver unrivalled mounting solutions.



Utility-scale & Custom

Our ground mount systems are intelligently designed for ease of installation, for maximum performance and efficiency and to utilise any of our foundation options.



Commercial & Domestic

The Modular system makes commercial and domestic-scale site planning and installation easy with standardised parts that are held in stock.



BESS & Transformer Mounting

Our platforms provide the most cost-effective, fast and simple construction for your BESS and transformer installation. They're also 100% recyclable!



Foundations

Whatever the terrain or ground conditions, our range of foundation options have been designed to work with all of our systems and on the most challenging of sites.

FIXING THE FUTURE SINCE 2015









Why choose Solarport?

Designed and manufactured by our in-house team of experts in engineering, design, and solar construction, our products guarantee rapid deployment and unparalleled reliability.

Enhanced by our high-volume manufacturing facilities and robust steel supply, we are equipped to process projects of any size, ensuring timely and efficient delivery.

Our ISO 9001 accredited design and manufacturing processes contribute to quick turnarounds, cost-effectiveness, and excellent customer support. We offer inventive solutions backed by extensive expertise, making us capable of tackling even the most challenging site conditions, anywhere in the world.

Rigorous quality assurance is applied to all our products, and we are committed to delivering a first-class service.

Gigawatts supplied across the UK & Europe

All systems fully **structurally calculated**

2 gigawatts+ of manufacturing capacity per year

Superior quality structural steel S350 - S450, ZM310 - ZM800



Our in-house specialists are at your service, offering full-scale support throughout each stage of your solar installation.

We aim to provide you with pragmatic advice and mounting systems that are time-efficient and cost-effective.

We offer warranties on all of our systems of up to 40 years, ensuring that your site is safeguarded for the future.



Your problems solved quickly

Our expert team is readily available to address your questions and provide ongoing support throughout the duration of your project.



Installation training

If you are new to our systems, there is no need to worry. We provide comprehensive and easy to follow installation guides. In addition to this, we also hold installation workshops at our manufacturing headquarters that can be booked, when required.



Solutions for all ground conditions

The modular nature of our systems allows installers to seamlessly integrate numerous foundation options to suit virtually all terrains – including slopes up to 45 degrees.

Solarport's dedication to ensuring that no site is off limits means that we have spent years researching and designing foundation solutions to make each site easy to install.

Our process

From initial contact, through to final site sign off, we are with our customers the entire way



Our expert team specialises in solar mounting system design and installation and is readily available to pinpoint the most efficient and cost-effective solution tailored to your needs.

Our commitment doesn't end with delivery; it's just the beginning.

Our team of solar installation specialists are on hand to offer comprehensive support through each stage of the installation process, up to and including final sign-off and warranty issuance.



Site analysis

Our mounting system's unmatched reliability starts with comprehensive analysis of site data



Our detailed design process begins with an in-depth technical analysis of geotechnical, topographical and foundation investigation results.

In evaluating this critical, site-specific field data, we determine the foundation, structural design and corrosion protection that the site requires. This ensures that every customer receives a robust, long-lasting and guaranteed mounting system.

This level of care and attention at the early stages of a mounting system design allows Solarport to save our customers money over the lifetime of their site.





Design

Engineered for precision, designed for ease: your tailored solar solutions with up to 40-year warranties

Utilising cutting-edge technology, our engineers meticulously model every system to achieve unparalleled efficiency, perfectly calibrated to the site-specific project requirements and environmental conditions.

Designed with practicality in mind, our systems prioritise ease of installation. They feature exceptional adjustability, one fixing size throughout and include innovative solutions that substantially mitigate the need for working at height.

As an ISO 9001-accredited organisation and members of the British Standards Institute, we stand by the integrity of our work. To further bolster confidence in our systems, we offer warranties that can extend up to 40 years.

Manufacture & delivery

Creating localised facilities for manufacture means that we can be faster, greener and more cost-effective



Managed by our team of in-house experts, our state-of-the-art, UK-based manufacturing plants boast an annual framework production capacity in excess of 2GW for solar PV.

This significant capacity, supported by our vast stock of various structural steel, enables us to meet the demands of even the largest utility-scale sites without compromising on quality or efficiency - ensuring stringent control from inception to completion.

Our depots are strategically positioned to facilitate seamless, reliable distribution and we are committed to transparency; guaranteeing reliable deliveries with no hidden charges or delays.







Site support

Decades of installation and site management experience

Solarport is founded on a wealth of experience installing and managing solar farms.

When it comes to installation and product support, our knowledge and problem solving abilities are unmatched within the industry.

We meticulously plan and design our systems to suit each project, but with large-scale installation, some advice may be required during a build. That's why, when it is needed, we are always available to help.

Our straightforward installation guides are supplied with every system, but if further assistance is required, our site team can call or visit site to ensure that a solution is always available.



Final sign off

Our customer's peace of mind is our priority. If required, we are able to supply official Solarport sign off on utility-scale installations



We know that each site is unique, with it's own set of complexities and we also understand the importance of peace of mind when it comes to large-scale installation.

Because of this, we offer an official sign off service if required.

Our specialist team, that are trained to know every aspect of each of our systems, can be deployed to site upon request, to inspect and validate installations.

This sign off process isn't mandatory, but helps to provide extra security for the system warranty.

Twin post custom ground mount system

Our system, tailored to suit your site-specific requirements











Portrait and landscape module mounting

Large array sizes

Range of angles available

Utilise all of our foundation options

Overview:

Our Twin Post System stands as the preferred choice for utility-scale installations, renowned for its customisable design, robust strength, and versatile adaptability. Capable of accommodating various array orientations—from 2 or 3 modules in portrait to 6 in landscape—it also offers compatibility for east/west orientations.

Typically deployed in environments where ground conditions and wind speeds would compromise the effectiveness of single-post systems, the Twin Post design offers superior stability and resilience.

To streamline the installation process, all of our ground-mount systems, including the Twin Post, utilise a uniform fixing size throughout the framework. This not only simplifies assembly but also eliminates potential on-site complications for installers.



Technical data twin post custom ground mount

Panel configurations:	2 in portrait, 3 in portrait, 4 in landscape, 5 in landscape (bespoke systems available on request)
Panel clamping:	Standard Clamping: Modules fitted using aluminium top hat and end clamps, with sliding clamps to give mounting positions. Clamps optimised for ease of installation with above and below module fastening.
	Sliding Rail Clamping: Modules fitted onto vertical rails using ARaymond PowAR® Cinch clamps. Fastened from under the module without power tools and an entirely screwless design for rapid installation.
System angles:	10° - 30° - angle will alter system minimum and maximum heights. (All south facing, unless requested by customer. East/west system also available)
Rail configurations:	2 in portrait, 4 purlins per bay. 3 in portrait, 6 purlins per bay. 4 in landscape, 5 purlins per bay. 5 in landscape, 6 purlins per bay
Upright configurations:	Twin post system
Linear upright dimensions from ground:	(Dependent on system angle) Minimum: 1.8m. Maximum: 3.5m. All dimensions are without panels mounted. (Bespoke heights available on request)
Ground clearance dimensions to rafter:	Standard height is 600mm. 800mm minimum recommended for grazing sheep. All dimensions are without panels mounted. (Custom heights available on request)
Foundation:	Piled, Ballasted, X Anchor, Spirafix, Direct Fix, Ground Screw
Frame material specification:	S350, S450 galvanised steel (ZM310, ZM430, ZM620, ZM800). Corrosion protection to be determined from site location and ground investigations
Wind speed and altitude:	Designed in accordance with BS EN 1991-1-4:2005 +A1:2010
Design codes:	BS EN 1090 & BS EN 1991 Parts 1, 3 & 7 (Eurocodes)

Single post custom ground mount system

Our system, tailored to suit your site-specific requirements





Portrait and landscape module mounting



Range of angles available



Suitable for ground undulations

Overview:

Our single post utility-scale ground mounted system is a brilliant solution for sites with arrays of a maximum of 4 modules in landscape or two in portrait.

If the site specific conditions and requirements permit a single post solution, our customers can benefit from using less material across their sites. Although solely compatible with piled foundations, the single post system is extremely versatile and suitable for utility-scale projects.

As with all of our ground mount systems, the framework only uses one fixing size throughout, saving installers issues on site.



Technical data single post custom ground mount

Panel configurations:	2 in portrait or 4 in landscape
Panel clamping:	Standard Clamping: Modules fitted using aluminium top hat and end clamps, with sliding clamps to give mounting positions. Clamps optimised for ease of installation with above and below module fastening.
	Sliding Rail Clamping: Modules fitted onto vertical rails using ARaymond PowAR® Cinch clamps. Fastened from under the module without power tools and an entirely screwless design for rapid installation.
System angles:	10° - 30° - angle will alter system minimum and maximum heights. (all south facing, unless requested by customer. East/west system also available)
Rail configurations:	2 in portrait, 4 purlins per bay. 4 in landscape, 5 purlins per bay
Upright configurations:	Single post system
Linear upright dimensions from ground:	(Dependent on system angle) Minimum: 1.8 m. Maximum: 3.5 m. All dimensions are without panels mounted. (Bespoke heights available on request)
Ground clearance dimensions to rafter:	Standard height is 600 mm. 800 mm minimum recommended for grazing sheep. All dimensions are without panels mounted. (Bespoke heights available on request)
Foundation:	C Pile, Concreted Pile, Direct Fix
Frame material specification:	S350, S450 galvanised steel (ZM310, ZM430, ZM620, ZM800). Corrosion protection to be determined from site location and ground investigations
Wind speed and altitude:	Designed in accordance with BS EN 1991-1-4:2005 +A1:2010

BESS & TX mounting systems

Custom design to perfectly fit all BESS & transformer equipment



Overview:

Solarport's BESS & TX mounting systems make mounting large-scale batteries, transformers and associated products more precise, simple, reliable and cost-effective compared with current market solutions.

Until now, the solution for BESS & TX installation has often meant extensive groundwork and use of substantial quantities of concrete, which comes with a host of expenses and practical, commercial and environmental drawbacks.

Our BESS & TX mounting systems are made from welded hot-formed steel sections, which are post-galvanised for ultimate support and durability. The channel section structure is secured throughout with high tensile galvanised fixings, ensuring that the entire assembly is incredibly accurate, strong and secure.

Technical data BESS & TX mounting systems

System configuration:	System sized and customised to suit a variety of BESS equipment and configurations (Battery arrays, BCP, PCS, Transformers, etc.). Customised options available
Frame specification:	Bolted and welded PFC construction, galvanised S355 steel or similar (Corrosion protection to be determined from site location and ground investigations, where carried out)
Adjustment:	Up to 50mm leg adjustment for installation (dependant on system type). Packers and shims available for further adjustment and levelling on site
Base configuration (dependant on underlying foundations):	Pile and Spreader Plate or Foot Plates
System height:	System height is dependent on foundation type, site conditions, and cable routing requirements
Wind speed and altitude:	Designed in accordance with BS EN 1991-1-4:2005 +A1:2010
Design codes:	BS EN 1090 & BS EN 1991 Parts 1, 3 & 7 (Eurocodes)



Foundation types & technical data for custom ground mount systems

Whatever the ground conditions, we have a foundation to suit it



Overview:

Whatever the terrain or ground conditions, our range of foundation options have been designed to work on even the most challenging of sites.

Our aim is to make sure that, when using a Solarport system, there is no site that's off-limits.

We will work with you to ensure the correct foundations are paired to your system and site location, maximising site viability and yield.



Name:	Concreted pile
Applicable with:	Twin post & Single post systems
Suitable for:	Sites where breaking ground is possible and a shorter pile is required and/or machinery is available
Installation:	Augered hole and pile set with Postcrete
Material:	S350, S450 galvanised steel (ZM310, ZM430, ZM620, ZM800). Corrosion protection to be determined from site location and ground investigations
Dimensions:	Pile dimensions, augered hole dimensions and amount of Postcrete determined by geotechnical and wind load test results
Design codes:	Designed in accordance with BS EN 1991-1-4:2005 +A1:2010. BS EN 1090 & BS EN 1991 Parts 1, 3 & 7 (Eurocodes)

Name:	Ballasted	
Applicable with:	Twin post system	
Suitable for:	Sites where breaking ground is not permitted (archaeological or geotechincal)	
Installation:	Steel plates weighted with high density concrete blocks. Total weight of blocks to be determined by geotechnical and wind load testing	
Material:	S350, S450 galvanised steel (ZM310, ZM430, ZM620, ZM800). Corrosion protection to be determined from site location and ground investigations	
Dimensions:	Plate size: 960mm x 900mm	
Design codes:	Designed in accordance with BS EN 1991-1-4:2005 +A1:2010. BS EN 1090 & BS EN 1991 Parts 1, 3 & 7 (Eurocodes)	mend



BS EN 1991 Parts 1, 3 & 7 (Eurocodes)



Name: X Anchor (Patent Number: GB2607092) Applicable with: Twin post system Suitable for: Sites that require shallow embedment and/or no heavy machinery Installation: Steel rods driven with hand tools Material: Hot rolled steel (S355JR) hot dipped galvanised to ISO 1461. S350 galvanised steel (ZM310). Corrosion protection to be determined from site location and ground investigations. Dimensions: Rod length determined by geotechnical and wind load test results Designed in accordance with Design codes: BS EN 1991-1-4:2005 +A1:2010. BS EN 1090 &

Name:	Spirafix			
Suitable for:	Sites that require shallow embedment and/or no heavy machinery	-	$\left \right\rangle$	
Installation:	Steel screws driven in with hand tools			
Material:	Sherardised steel			
Dimensions:	50 mm x 1050 mm			
Website link:	https://www.spirafix.com			



Modular ground mount system

2-in-portrait & 1-in-portrait systems for commercial and domestic-scale, held in stock for rapid deployment



Overview:

The Modular system is ingeniously engineered for commercial and domestic sites, with the flexibility to accommodate any of our foundation options. Site planning, design, and deployment are streamlined for ultimate convenience.

Benefit from an elegant design that minimises component variations, featuring universal parts for easy expandability. The Modular framework employs a single fixing size throughout, eliminating on-site complications and accelerating the installation process.

Strategically designed to be compatible with 80% of the UK's landmass and versatile enough to accommodate the majority of panel sizes in the market, the Modular system simplifies planning and offers peace of mind for those that want Solarport quality, straight off the shelf.

With Modular systems readily stocked, we guarantee swift, direct-to-site deliveries.



Technical data modular ground mount

Modular is held in stock for rapid distribution and can utilise 7 different foundation options, ensuring that almost no terrain is off limits.

The modular design allows for the tables to be built in bays of 2 or 3 panels wide and is suitable for ground up to a maximum slope of approximately 5°.

Panel configuration:	2-in-portrait & 1-in-portrait
Panel min and max length:	Minimum length: 1650mm. Maximum length: 2470mm
Purlin configuration:	2-in-portrait: 4 purlins, position determined by panel dimensions and clamping zones
	1-in-portrait: 2 purlins, position determined by panel dimensions and clamping zones
Panel clamping zones:	Please refer to panel manufacturer's specification
Panel clamp specifications:	Panels fitted using aluminium top hat and end clamps, with sliding clamps to give mounting positions
System angles:	20°, 25°, 30°
System min and max heights:	20°: Minimum (clearance): 785 mm Maximum (to top of rafter): 2200 mm 25°: Minimum (clearance): 735 mm Maximum (to top of rafter): 2455 mm 30°: Minimum (clearance): 680 mm Maximum (to top of rafter): 2694 mm
Bay sizes:	2 panel and 3 panel wide
Table configuration min and max:	2 panels x 2 panels min. 30 panels x 2 panels max.
Bay pitches:	2000 mm, 2500 mm, 3000 mm, 3500 mm. Each pitch can have 100 mm added if Extension Joiner is used
Foundation types:	C Pile, Concreted Pile, Ballasted, X Anchor, Spirafix, Direct Fix, Ground Screw
Material specification:	S350 & S450 grade steel. Coating Z600 or ZM310
Wind speed:	Fundamental basic UK wind velocity within the UK up to 28m/s
Snow loads:	0.7 kN/m² max
Design codes:	Designed in accordance with BS EN 1991-1-4:2005 + A1:2010. BS EN 1090 & BS EN 1991 Parts 1, 3 & 7 (Eurocodes)

Modular foundation types and technical data

Install the Modular system with any of the following foundation options



Name:	C Pile
Suitable for:	Sites where breaking ground is possible, geotechnical results permit use and/or machinery is available
Installation:	Piling rig. 2000 mm pile, 1500 mm embedment
Material:	S350 & S450 grade steel. Coating Z600 or ZM310
Dimensions:	120 mm x 70 mm x 3 mm x 2000 mm
Design codes:	Designed in accordance with BS EN 1991-1-4:2005 +A1:2010. BS EN 1090 & BS EN 1991 Parts 1, 3 & 7 (Eurocodes)

Name:	X Anchor (Patent Number: GB2607092)
Suitable for:	Sites that require shallow embedment and/or no heavy machinery
Installation:	Steel rods driven in with hand tools
Material:	Hot rolled steel (S355JR). Hot dipped galvanised to ISO 1461
Dimensions:	600 mm embedment
Design codes:	Designed in accordance with BS EN 1991-1-4:2005 +A1:2010. BS EN 1090 & BS EN 1991 Parts 1, 3 & 7 (Eurocodes)







Name:	Concreted Pile
Suitable for:	Sites where breaking ground is possible, geotechnical results permit use and/or machinery is available
Installation:	1500 mm pile, 250 mm dia x 1000 mm deep augered hole, 4 bags of Postcrete per hole
Material:	S350 & S450 grade steel. Coating Z600 or ZM310
Dimensions:	120 mm x 70 mm x 3 mm x 1500 mm
Design codes:	Designed in accordance with BS EN 1991-1-4:2005 +A1:2010. BS EN 1090 & BS EN 1991 Parts 1, 3 & 7 (Eurocodes)





ame:	Direct Fix
uitable for:	Non-cracked concrete foundations ranging between C20/25 &CS0/60
stallation:	Torque controlled expansion bolts fitted into concrete with hand tools
aterial:	Adjustable upright: S350 & S450 grade steel. Coating Z600 or ZM310. Bolts: High tensile steel hot dipped galvanised to EN 1461
imensions:	M12 x 145mm torque controlled expansion bolts
esign codes:	Designed in accordance with BS EN 1991-1-4:2005 +A1:2010. BS EN 1090 & BS EN 1991 Parts 1, 3 & 7 (Eurocodes)



Name:	Spirafix
Suitable for:	Sites that require shallow embedment and/or no heavy machinery
Installation:	Steel screws driven in with hand tools
Material:	Sherardised steel
Dimensions:	50 mm x 1050 mm
Website link:	https://www.spirafix.com

Name:	Ground Screw
Applicable with:	Twin post systems
Suitable for:	Sites where breaking ground is possible
Installation:	By hand and/or with drilling machinery
Material:	Q235 steel. Hot dip galvaised to DIN EN ISO 1461
Dimensions:	Pipe - 68 x 2 x 1200mm. Flange – 120 x 5mm











FIXING THE FUTURE

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