

# HP SitePrint

## Robotic solution for autonomous layouts

We've combined our printing knowhow and robotics technology to revolutionize construction site layouts bringing breakthrough efficiency



### Groundbreaking performance and productivity<sup>1</sup>

- Improve layout productivity up to ten times compared to traditional chalk-line layout.
- Autonomous Printing with obstacle avoidance and HP Smart Navigation System.
- Printed on-slab text helps deliver executions as per plan.

### Accurate layouts

- Precise printing to complete project accurately.
- Complex layouts spot-on, laying out intricate arcs and circumferences.
- Raise the bar of predictability, minimizing redos and with great rigour.

### One easy solution to do it all

- Simple layout management with cloud-based tools.
- Easily print on various surfaces thanks to HP inks expertise.
- Compact design that fits in a portable case for effortless transport.



# The robotic solution for autonomous layouts in various site conditions

Construction sites are one of the most unpredictable environments and conditions change on a regular basis. HP SitePrint adapts to your job site's conditions to deliver efficient and accurate layouts – safely.

- Achieve precision navigation and printing on rough surfaces: its printhead is positioned 19 mm (3/4 inch) above the floor to prevent collisions and to allow printing on areas that don't require a broom-swept floor.

- Operate in temperatures ranging from 14°F (-10°C) to 122°F (50°C), allowing you to layout no matter the season.

- Refined obstacle avoidance capabilities. A new depth camera provides detailed spatial representations of the environments, helping navigate unforeseen onsite obstacles with ease, bringing incremental robot autonomy.

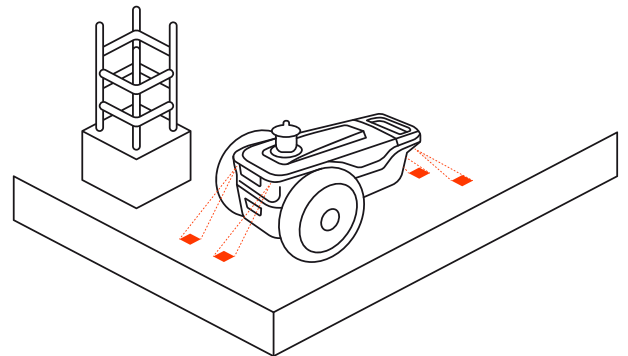
- Real-time route adjustments with HP Smart Navigation System. The new HP-engineered Smart Navigation System processes obstacle data captured by the depth camera, enabling seamless navigation around unexpected hindrances.

- HP SitePrint offers a comprehensive portfolio of 8 easily interchangeable inks designed for a variety of surfaces—like tarmac, rough concrete, plywood, or formwork, amongst others—and different durability requirements from permanent to erasable.

## Safety Stop Technology

Safety is always a top concern for construction companies. Construction sites' dynamic nature can make them unstable and unsafe, so ensuring the safety and well-being of workers is a main priority.

Full autonomy can only be achieved if you can trust the robot to safely perform in any circumstance. The robotic layout system operates autonomously by incorporating two sets of sensors: a first set that prevents collisions, and a second set that is hardware-activated, and prevents accidental falls by continuously monitoring its environment to safely detect any potential obstacles, cliffs, or depressions—establishing it as a secure robotic solution for sites.



HP SitePrint's safety features are fully certified, so you can be sure it successfully meets the prescribed industrial safety standards:

- United States & Canada CAN/UL 3100 TÜV SÜD Certified.
- EU MD compliant EN 1175, EN 60204-1, EN ISO 3691, EN ISO 13849

## Adapted to your current layout workflow



Automating your layout process is easier than you think.

HP SitePrint pairs with a Robotic Total Station (RTS) to achieve precise layouts. It is fully integrated in the workflow that you use, with the same software that allows you to use your RTS for other tasks on the construction site. As of February 1<sup>st</sup>, 2024, it is compatible with leading RTSs in the industry; including the Leica TS16, Leica iCR80, Leica iCR70, Trimble RTS573, Trimble S9, and the Topcon LN-150.

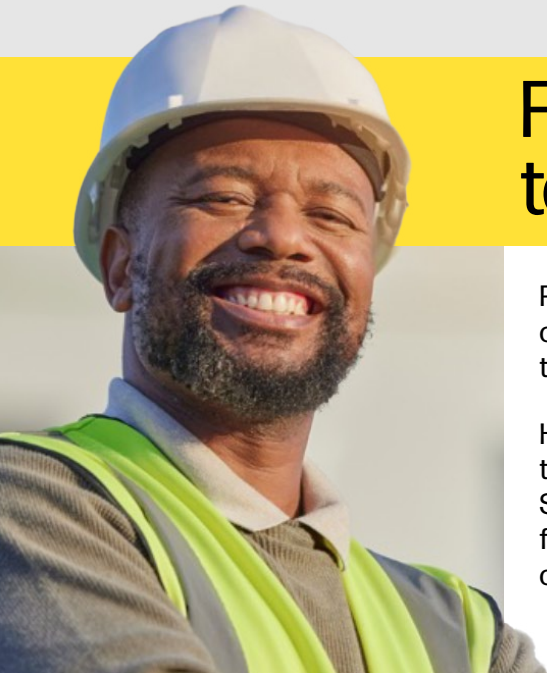
# Professional support from our network of industry partners

Time is crucial in construction: delays can result in extra costs – significantly impacting the financial viability of the project's stakeholders.



That's why we are committed to providing timely and efficient solutions through our extensive network of industry expert partners, who provide support for both HP SitePrint and Robotic Total Stations.

Our local HP SitePrint Specialists network ensures there is always an expert close to you ready to offer personalized advice, consultancy, remote and on-site support, or provide a unit swap when necessary, to prevent delays and increase uptime.



## Flexible Pay as you Go model tailored to your business's needs

Reliable service and support contracts are fundamental in keeping projects on track—ensuring that equipment and tools are available whenever you need them.

HP SitePrint is a cost-effective solution that adapts to the needs of construction professionals. The HP SitePrint cloud management tool includes a simulator for cost and time calculations, to predict time of completion and costs for jobsite layout execution.



HP SitePrint comes with a comprehensive support contract bundled into a Pay as you Go usage rate, which covers all the essentials to run the robot for smooth operation: unlimited inks, support with repairs included, and software and firmware upgrades.



The cost adjusts based on customer output with monthly caps for high-volume users. The monthly cap allows cost control knowing the maximum you will pay per month. In all cases, you only pay for what you use.

## What's included



HP SitePrint Pay as you Go support usage rate includes unlimited inks designed to print on a variety of surfaces, remote and on-site support services from our specialists, comprehensive coverage including parts and repairs, plus access to the last software updates and the latest firmware versions.

We are constantly developing new features and enhancements and delivering them through software upgrades. This way, our customers will always have the most advanced and reliable version of the product.



# Technical specification

## GENERAL

General	HP SitePrint Robot
Product	A2PS9A
Power management	Exchangeable Lithium-Ion battery Each battery has a runtime of 4 hours. By combining both batteries, you can sustain continuous operation throughout an entire day shift. <sup>2</sup>
Application	Layout for building construction: interior walls, Mechanical, Electrical, Plumbing, Fire Protection, HVAC and Formwork.
Material	Porous surfaces: polished and rough concrete, tarmac and wood. Non-porous surfaces: terrazzo, vinyl and epoxi
Obstacle avoidance	4 Safety sensors to avoid falloffs 3 LiDAR sensors to avoid collisions Depth Camera for HP Smart Navigation System
Step Overcoming Capacity	0.74 in (19 mm)

## PRINTING

Ink cartridge	1 cartridge (400ml Ink System)
Priting speed	Up to 5,314 ft/h (1.260 m/h)
Navigation speed	8.267 ft/h (2.520 m/h)
Minimum printable width	0.08 in (2 mm)
Maximum printable width	2 in (51 mm)
Printable elements	Lines, Text, dashed-lines, curved lines, circumferences.
Printhead to floor distance	0.74 in (19 mm)
Accuracy tolerance	1/8 in (3 mm) <sup>3</sup>

## INK

7J3Q9A	HP SitePrint 100 Blue SB Semi-Permanent
76Y83A	HP SitePrint 101 Red SB Semi-Permanent
76Y82A	HP SitePrint 102 Black SB Permanent
7J3R0A	HP SitePrint 103 Black WB Permanent
7J3R1A	HP SitePrint 104 Cyan WB Permanent
7J3R2A	HP SitePrint 105 Magenta WB Permanent
76Y80A	HP SitePrint 107 Cyan WB Semi-Permanent
76Y81A	HP SitePrint 108 Magenta WB Semi-Permanent
76Y84A	HP SitePrint 109 Cleaning Fluid

## ENVIRONMENTAL

Protection	IP44/NEMA1
Maximum slope	2.5°
Recomended operating temperature range	From 14°F (-10°C) to 122°F (50°C) <sup>4</sup>
Operating humidity	20%-80%
Operating altitude	2,000 m

## DIMENSIONS

Dimensions	Printer only: 20.6 x 12.4x10.2 in (52.5 x 31.7 x 26.1 cm) With transportation case: 2.46 x 19.3 x 14.4 in (62.5 x 49.0 x 36.5 cm)
Weight	Printer only: 19.8 lb (9.0kg) With transportation case: 42.1 lb (19.1kg)

## CONNECTIVITY

RTS Compatibility	Leica iCR70/80 Leica TS16 Topcon LN-150 Trimble RTS573 Trimble S9
Connectivity	Bluetooth, 4G, WiFi

## CERTIFICATIONS

Safety	Electromagnetic	Environmental
United State & Canada CAN/UL 3100 TÜV Certified; EU MD compliant EN 1175, EN 60204-1, EN ISO 3691, EN ISO 13849.	Compliant with Class A requirements, including USA (FCC rules), Canada (ICES), EU (RED), Australia (ACMA), New Zealand (RSM).	WEEE, EU RoHS, REACH, CE marking compliant.

<sup>1</sup> Up to ten times the productivity' claim is based on data from pilot case studies where HP SitePrint was used- comparing the HP SitePrint performance either to the manual chalk-line layout that was done before HP SitePrint was used on the same job or to the customer estimation on the time/resources needed based on experience with similar projects. Exact improvement factors will vary from project to project and can be influenced by multiple factors, such as the line density or the dimensions of the site.

<sup>2</sup> Battery life was tested at 68°F (20°C). The battery retains over 75% of its initial capacity after 300 charging cycles.

<sup>3</sup> Accuracy tolerance of +/- 1/8in (+/- 3mm) average while operating with a 3" Total Station at a distance between 15.4ft and 98.4ft" (5m and 30m")

<sup>4</sup> Recommended operating temperature range: Water-Based Inks from 32°F to 122°F (0°C to 50°C) and Solvent-Based Inks from 15°F to 122°F (-10°C to 50°C)