Monna™

THE CYCLING POINT

A whole new cycling experience

We are faced with rising global environmental challenges that require renewable energy solutions and environmentally-friendly practices be introduced in our daily lives.

Cycling is both "greener" and healthier alternative to driving, or using public transport. Moreover, areas with well-developed cycling infrastructure are known to provide more comfortable living and working conditions.

Monna cycling point is a simple entry point to the world of smart cycling equipment. A relatively simple looking product, but with broad usage potential, a solar powered cycling point comes with multiple functionalities – bike racks and electrical sockets for charging electric bicycles, bike repairing tools, wireless charging pad and charging ports for wired phones, night illumination, data collecting etc.

Our smart cycling point has in-built sensors for data collection and analysis, gathering information on, for example, the number of charged bicycles, operability of various components, and atmospheric conditions. An additional advantage is that settings can easily be changed on the Monna cycling point dashboard according to the owner's particular needs.

With powerful solar panels and elegantly design-ed, high-quality steel construction, Monna cycling point can be installed anywhere – in both urban and rural areas.

Why Monna?

Cycling in urban and rural areas has become a global trend. This gave rise to a whole new tourism branch dedicated to cycling enthusiasts – cyclotourism. Monna cycling point therefore presents a perfect and unique Internet of Things (IoT) product for smart environments, both in the cities and in the countryside. Overall usage experience and feedback will serve as the basis for future development of smart solutions for digitalization in sustainable environments.

In our efforts to resolve the challenges of sustainability, we focus on the nexus between people, technology, and urban design. Monna is created to be the most advanced cycling point in the world, with the purpose of facilitating the implementation of strategic enhancements to civic spaces for better living.

Monna STREET

There, when you need it

Monna Street is a compact cycling point for narrow locations, such as streets or cycle tracks.
Regardless its compact size, Monna Street basic functions are 100% solar powered, and do not require any additional power supply, or infrastructural adjustments.

A hybrid module upgrade allows for more advanced functions, such as electric bicycle charging sockets, outdoor digital display, CCTV system etc.; however, it requires AC grid power.

With its simple, balanced design and convenient size, Monna Street brings a touch of modern aesthetic to outdoor spaces while also serving as a multifunctional cycling stop point.

Lead production time: **60 – 90 days**

Minimum order: **1 pc**

Available colours: **White** — **Other colours on request**

Construction
Dimensions: W: 178 cm; D: 45 cm; H: 220 cm
Weight: 100 kg + (depending on additional options)

Photovoltaic modules
Monocrystalline / Total power: 110 W

Battery pack
Type: AGM / Capacity: 72 Ah

USB charging
Number of ports: 2; Power (per port): 5 W (1A)

Wireless charging
Number of chargers: 2; Power: 10 W / Efficiency: up to 70%

Internet technology
4G LTE / Speed: up to 150 Mbps / Range: 4 – 20 meters
Other: custom SSID, user and web page restriction, custom homepage...

Sensors
Temperature, humidity, device charging counters, energy production & consumption, Internet connections counter & data traffic usage, battery status, rain sensor, system sensor, bicycle parking counter, electrical bicycle charger counter, etc.

Ambient light
Range: 2 meters; Colour: White (other colours on request)

LCD Display
Size: 7"; Type: TFT display
Monna battery status, operability of various components, electrical charger bicycle control, air compressor control, etc.

Bike repair kit
Set with standard screwdrivers; 6 regular wrenches
8 hex keys of various sizes

Air compressor
Operated by using 7" LCD display; Adjustable air hose
Start/stop system

Monna CITY

Ride around the city

Monna City is a perfect cycling point for urban locations, such as city squares, marinas or parks.

Its basic functions are 100% solar powered, and do not require any additional power supply, or infrastructural adjustments.

A hybrid module upgrade allows for more advanced functions, such as electric bicycle charging sockets, outdoor digital display, CCTV system etc.; however, it requires AC grid power.

With its simple, balanced design and convenient size, Monna City brings a touch of modern aesthetic to outdoor spaces while also serving as a multifunctional cycling stop point.

Lead production time: **60 – 90 days**

Minimum order: **1 pc**

Available colours: **White**   **Other colours on request**

Construction
Dimensions: W: 248 cm; D: 45 cm; H: 220 cm
Weight: 200 kg + (depending on additional options)

Photovoltaic modules
Monocrystalline / Total power: 150 W

Battery pack
Type: AGM / Capacity: 72 Ah

USB charging
Number of ports: 2; Power (per port): 5 W (1A)

Wireless charging
Number of chargers: 2; Power: 10 W / Efficiency: up to 70%

Internet technology
4G LTE / Speed: up to 150 Mbps / Range: 4 – 20 meters
Other: custom SSID, user and web page restriction, custom homepage...

Sensors
Temperature, humidity, device charging counters, energy production & consumption, Internet connections counter & data traffic usage, battery status, rain sensor, system sensor, bicycle parking counter, electrical bicycle charger counter, etc.

Ambient light
Range: 2 meters; Colour: White (other colours on request)

LCD Display
Size: 7"; Type: TFT display
Monna battery status, operability of various components, electrical charger bicycle control, air compressor control, etc.

Bike repair kit
Set with standard screwdrivers; 6 regular wrenches
8 hex keys of various sizes

Air compressor
Operated by using 7" LCD display; Adjustable air hose
Start/stop system

Monna COUNTRY

Reach the hilltops

Monna Country is our most powerful cycling point model, designed for countryside locations, such as countryside cycling routes, hills, etc.

Its basic functions are 100% solar powered, and do not require any additional power supply, or infrastructural adjustments.

Larger and more powerful solar panels allow Monna Country to perform more advanced functions, such as electric bicycle charging sockets, running entirely on solar power, and eliminating the need for AC grid power.

Monna Country allows charging of electric bicycles even on the most inaccessible locations, thus extending cycling range on countryside routes.

Lead production time:	**60 – 90 days**
Minimum order:	**1 pc**
Available colours:	**White** / **Other colours on request**

Construction
Dimensions: W: 300 cm; D: 55 cm; H: 220 cm
Weight: 300 kg + (depending on additional options)

Photovoltaic modules
Monocrystalline / Total power: 240 W

Battery pack
Type: Li-ion / Voltage: 24 V / Capacity: 100 Ah

USB charging
Number of ports: 2; Power (per port): 5 W (1A)

Wireless charging
Number of chargers: 2; Power: 10 W / Efficiency: up to 70%

Internet technology
4G LTE / Speed: up to 150 Mbps / Range: 4 – 20 meters
Other: custom SSID, user and web page restriction, custom homepage...

Sensors
Temperature, humidity, device charging counters, energy production & consumption, Internet connections counter & data traffic usage, battery status, rain sensor, system sensor, bicycle parking counter, electrical bicycle charger counter, etc.

Ambient light
Range: 2 meters; Colour: White (other colours on request)

LCD Display
Size: 7"; Type: TFT display;
Monna battery status, operability of various components, electrical charger bicycle control, air compressor control, etc.

Bike repair kit
Set with standard screwdrivers; 6 regular wrenches
8 hex keys of various sizes

Air compressor
Operated by using 7" LCD display; Adjustable air hose
Start/stop system

Monnā

**Advanced wireless chargers
integrated in seating surface**

24/7 Dashboard

Monna's dashboard is in effect the brain of the cycling point.

Once they purchase Monna cycling point, our customers get their personal profile on Include's web-based dashboard. At any time, from any location, Monna cycling point owners can get fresh data feed from their cycling points.
This is a feature that makes Monna cycling point more advanced than any other similar product on the market.

The dashboard performs the following functions:

• Overview of all locations where Monna cycling points are installed
• Reporting information on the number of charged bicycles*
• Reporting information on the number of charged smart devices
• Reporting information on the number of bicycles parked on the bike rack
• Reporting information on the number of Wi-Fi users and their internet consumption
• Remote control of internet access (including changing passwords)
• Remote control of ambient lights and charging signal lights (including setting times to turn the lights on and off automatically)
• Providing weather info like a mini meteo station (measuring humidity, temperature, and precipitation in the area).

*works only when Monna is upgraded with additional equipment (electrical sockets)

include

DASHBOARD

Home
Steora
Monna
Insolation
Advertising

Monna ID

1040
1042
1056
1057
1058
1059
1065
1069
1171
1372
1191
1372
1384
1528

Location   Solin
Bench owner   Include
Is Active   ●

Temperature: 27.8 ˚C
Humidity: 52,9 %

Usage summary

Select date range:

From 📅   To 📅

2.984	2.225	306	36	560	13470
Solar produced kWh	Consumed kWh	USB charging	Wireless Charging	Wi-Fi users	Internet data usage [MB]

Last Report: Oct 15, 2018 7:58:00
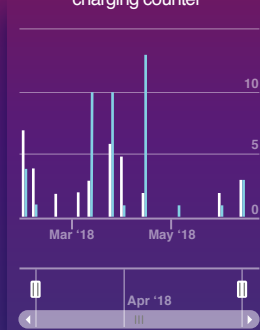
Select chart to show

☐ Solar power   ☑ Battery Voltage   ☐ Internet user count   ☑ Charging counter   ☐ Monthly usage
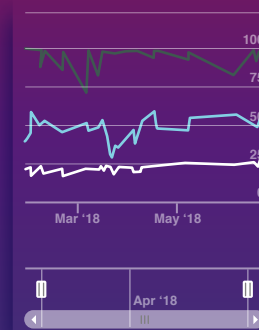☑ Weather   ☐ Battery status   ☐ Grid power

Battery Voltage
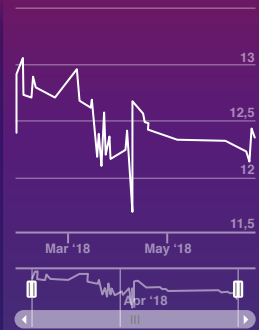
Usb and Wireless charging counter

Weather

OFFLINE CHAT

Welcome, ivanmrvosh
hr | en | es | de | it | fr

Additional options

Electrical sockets

Two electrical sockets operated by 7" display. Each socket provides up to 250W of power for charging lectric bicycles, laptops, or other electronic devices.
Cycling point models: All (*Monna Street/City require hybrid module for full operation)
Minimum quantity: 1 pc

Billboard

Billboard for classical paper advertising. B2 poster for Monna Country (500 x 707 mm), and B3 poster for Monna City (353 x 500).
Cycling point models: All (*Monna Street/City require hybrid module for full operation)
Minimum quantity: 1 pc

Digital display

Digital display for outdoor advertising, operated using the Monna Dashboard.
• Monna Street/City: 27" (336 x 597 mm) 1080 x 1920 super-bright outdoor display
• Monna Country: 37" (460 x 820 mm) 768 x 1366 super-bright outdoor display
• Cycling point models: All (**all models require hybrid module for full operation)
Minimum quantity: 1 pc

CCTV camera

CCTV camera with integrated night recording. Video is stored on the hard drive inside the cycling point.

Cycling point models: All (*Monna Street/City require hybrid module for full operation)
Minimum quantity: 1 pc

Sound system

Audio-visual reproduction system
Cycling point models: All
Minimum quantity: 10 pcs

Bicycle rack

Single bike rack installed on demand
Cycling point models: All
Minimum quantity: 1 pc

Radio system

DVBT stream radio stations with pre-defined frequency - motion sensor activation
Cycling point models: All
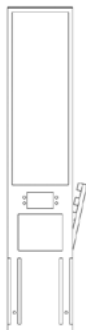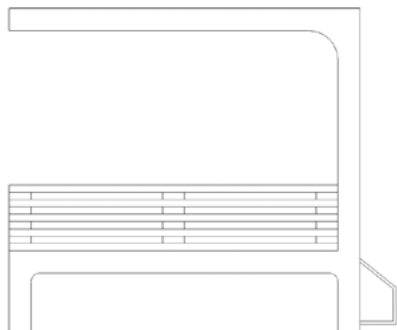Minimum quantity: 1 pc

Designed & Produced in EU

FaQ

How long does it take to fully charge an electric bicycle?

Charging time depends on the bicycle charger and battery capacity. Each electrical socket on Monna cycling point provides up to 250W of electricity, which exceeds the amount of power standard bicycle chargers normally use. Ideally, it could fully charge bicycle battery in under 90 minutes. Regular electric bicycle charging time to full battery is between 3 and 5 hours.

How many days can Monna City (without hybrid upgrade) work without sun?

This depends on several factors, such as the number of Monna cycling point users, amount of sun and clouds during daylight hours etc. Usually, Monna cycling point can function normally up to 5 days without direct sun exposure before the primary functions start to power off to save the battery. USB charging ports are the last to shut down.

How does air compressor work?

Air compressor is easily operated by using 7"display on Monna cycling point. Simply set the required amount of air pressure on the display, connect the air hose to the tyre valve and click 'START' on the display. When adequate air pressure is reached, the charging will stop.

How long does it take for Monna City (without hybrid upgrade) to be fully charged?

In summer days, Monna City can charge its battery system within 24 hours, while in the winter this can take up to 7 days. This is why Monna City is mostly in standby mode during winter (this refers only to Monna City, since Monna Country produces 240W of energy from solar panels, so its charging period is shorter).

For more info,
please visit include.eu
or scan the QR code.

We create amazing technology products.

We are Include.

A European hardware company founded by young innovator Ivan Mrvoš, we earned recognition following a large investment in 2017, quickly becoming one of the best producers of smart street furniture in Europe by inventing and producing Steora smart bench.

Our supply channels, in combination with production department, sales and customer care unit, can respond quickly and deliver even the most complex solutions of the highest quality to our customers.

5 continents. Monna cycling point is our new GreenTech and IoT solution intended for bike users in urban and rural areas, and directly responding to growing demands of cyclotourism.

Our highly skilled R&D team is engaged in development of both hardware, and software solutions, which in effect means we have the capability to develop any IoT or solar powered solution for smart cities.

Based in Solin, Croatia, in a 2000 m² facility with 35 highly educated employees, we are recognized as a serious development IoT platform, growing rapidly in terms of company size, sales volume and global reach.

With Steora smart bench global footprint of more than 800 benches on 40 markets around the world, we are involved in major 'Smart city' projects, and have made our presence known in over 260 cities and municipalities across

We believe that technology is a driver of equality and inclusion. Our mission is to find undiscovered potential around us, and use it to create amazing technology products designed to improve lives of urban and rural users.

Include Ltd.

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