Bench for the 21st century

For hundreds of years the traditional benches had just one purpose – to be a sitting place. While technology and public spaces evolved together, benches remained the same.

Our mission to reinvent the park bench started back in 2015, when we introduced Steora Standard - world’s first mass produced smart bench for public spaces.

Since then, we have developed several Steora models and additional options. Today, it is incredible what Steora smart bench can do – from charging phones, earbuds, smart watches or e-bikes, providing Wi-Fi, to heating the space around it during the winter days.

It is amazing what Steora provides to cities and municipalities – a platform which gathers a variety of information, from environmental data to data about usage of specific location. A system for smart advertising and a real-time surveillance – all integrated in a park bench.
Since 2015 Steora smart bench has reached 56 countries around the world with more than 300 cities and municipalities joining our mission to give everyone a chance to experience public spaces in a new way.

Until the end of 2020 almost four million people used Steora benches, and more than 61 thousand kWh of clean energy was produced, thus reducing CO2 emissions by 34 tons.

In November 2020 we introduced new Steora models - Classic, City and Cyclo. New Steora models are a result of a five years’ experience and our devotion to create the world’s best park bench for the 21st century.
Steora Classic is developed as a replacement for all regular street benches around the world.

It is a first-ever smart bench, with a price of an ordinary street bench. In essence, Classic bench core features are PV modules, fast wireless charging, ambient light and environmental sensors. The design is fully modular, with possibilities to change armrests, legs and other parts of the bench, making it adaptable for any location in the world.

With a set of extraordinary additional options, the Classic model can become e.g. mini weather station or even outdoor heating spot during the cold winter days.
Construction
Dimensions: W: 181 cm ; D: 65 cm ; H: 51 cm. Weight: 55 kg.
Materials: alu-zinc, aluminium, hot-dip zinc coated steel [EN10346], galvanized low carbon steel [ISO 2081]

PV modules
IK08 [EN 62262] vandal proof
99W power output

Li-ion battery pack
Low-temperature resistance
Advance BMS

2 x Qi wireless charging
Supporting all Qi phones, watches and earbuds
Smart energy-saving standby system

LED ambient light
Automatic ON/OFF system
Time adjustable depending on the season

Seating surface cooling system
Air cooling technology
Automatic temperature trigger

Sensors
PHT sensor – pressure, temperature, humidity
Energy sensors, Users counter (number of seating)

Real-time GPS location
Online alarm if bench location changes
Location visible over Solos Smart City platform

Internal server communication system
Included 5-year connectivity with Solos Smart City platform
Online product maintenance and updates

Battery status indicator
Integrated into the bench body
25%, 50%, 75% and 100% status

Detailed technical specification can be found in Steora Classic datasheet.
Steora City smart bench is the world most powerful bench ever created.

City shares same technology and core features as the Classic model, but with wider set of additional options.

When equipped with optional LCD display and advanced AI camera for precise DOOH advertising, City becomes a perfect option for high frequent locations, thus creating revenue and ROI - already proven in several cities around the world.

Our new City model also provides fast wireless charging and network of reliable sensors which gather information in bench surrounding – all packed in self-sustainable and environmentally friendly product with refurbishing option.
**Construction**
Dimensions: W: 181 cm; D: 45 cm; H: 51 cm. Weight: 65 kg.
Materials: alu-zinc, aluminium, hot-dip zinc coated steel [EN10346], galvanized low carbon steel [ISO 2081]

**PV modules**
IK08 [EN 62262] vandal proof
99W power output

**Li-ion battery pack**
Low-temperature resistance
Advance BMS

**2 x Qi wireless charging**
Supporting all Qi phones, watches and earbuds
Smart energy-saving standby system

**LED ambient light**
Automatic ON/OFF system
Time adjustable depending on the season

**Seating surface cooling system**
Air cooling technology
Automatic temperature trigger

**Sensors**
PHT sensor – pressure, temperature, humidity
Energy sensors, Users counter (number of seating)

**Real-time GPS location**
Online alarm if bench location changes
Location visible over Solos Smart City platform

**Internal server communication system**
Included 5-year connectivity with Solos Smart City platform
Online product maintenance and updates

**Battery status indicator**
Integrated into the bench body
25%, 50%, 75% and 100% status

Detailed technical specification can be found in Steora City datasheet.
Steora Cyclo smart bench is setting future standards in micromobility.

It comes with two bike racks, smart chargers for e-bikes and e-scooters, together with an air compressor and high-quality tools kit, responding to all possible needs of bike and other lightweight vehicle users. Cyclo model also comes with fast wireless charging, environmental sensors and is fully modular with add-ons such as flowerpot.

Streets of the world are full of e-bikes, e-scooters and other micromobility vehicles, often lacking in supporting infrastructure for charging or making quick simple repairs when needed.

E-bike and e-scooters connectors on Cyclo model are designed to cover any charging standard – from USA to Australia.
Steora CYCLO with add on back rest

Construction
Dimensions: W: 181 cm ; D: 45 cm ; H: 51 cm. Weight: 105 kg.
Materials: alu-zinc, aluminium, hot-dip zinc coated steel [EN10346], galvanized low carbon steel [ISO 2081]

PV modules
IK08 (EN 62262) vandal proof
99W power output

Li-ion battery pack
Low-temperature resistance
Advance BMS

2 x Qi wireless charging
Supporting all Qi phones, watches and earbuds
Smart energy-saving standby system

LED ambient light
Automatic ON/OFF system
Time adjustable depending on the season

Seating surface cooling system
Air cooling technology
Automatic temperature trigger

Sensors
PTF sensor – pressure, temperature, humidity
Energy sensors. Users counter (number of seating)

Real-time GPS location
Online alarm if bench location changes
Location visible over Solos Smart City platform

Internal server communication system
Included 5-year connectivity with Solos Smart City platform
Online product maintenance and updates

Battery status indicator
Integrated into the bench body
25%, 50%, 75% and 100% status

Air compressor
Supporting Presta and Schrader valves
Automatic start/stop system

Hand tools
Screwdrivers (phillips and flat)
Hexagons (4,5,6) Wrenches (7,8,9,10,13,14,15,16)

DC charging plugs
3 x e-scooter connectors (Lime, Bird, Xiaomi, Razor, Segway)

AC socket
220V AC charging socket
Safety mechanism

Bike holder
Metal bike holder

Detailed technical specification can be found in Steora Cyclo datasheet.
## ADDITIONAL OPTIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>CLASSIC</th>
<th>CITY</th>
<th>CYCLO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Backrest</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>With integrated PV modules 66W power output</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Backrest and armrest</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>With integrated PV modules 66W power output</td>
<td></td>
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<tr>
<td><strong>Flowerpot</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Soil moisture sensor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4 x USB fast chargers</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Apple fast charging Qualcomm quick charge</td>
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<td></td>
<td></td>
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<tr>
<td>Samsung adaptive fast charging</td>
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<tr>
<td><strong>Air quality sensors</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>PM2.5, PM10 No sensor Ozone sensor</td>
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<td></td>
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<tr>
<td><strong>Noise sensor</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Sensor range from 25 dB to 130 dB</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Wi-Fi hotspot system</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Editable homepage and Wi-Fi name Support SIM or ethernet connectivity</td>
<td></td>
<td></td>
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<tr>
<td><strong>Seating surface heating system</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Works during winter days Automatic temperature trigger Requires hybrid module</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hybrid module</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Using grid power for 0/24 operation Designed for long winters without sunlight</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>LCD display</strong></td>
<td>●</td>
<td>●</td>
<td></td>
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<tr>
<td>19” outdoor LCD display</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Using grid power for 0/24 operation</td>
<td></td>
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</tr>
<tr>
<td><strong>AI/ML LCD display</strong></td>
<td>●</td>
<td>●</td>
<td></td>
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<tr>
<td>19” outdoor LCD display</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>AI camera with pedestrian’s info</td>
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</table>
Each Steora bench can be upgraded by a variety of additional options, making every model fully modular and even more advanced.

There are mechanical add-ons, such as smart flowerpot, backrest and armrest, as well as electrical add-ons, such as smart USB chargers, air quality sensors, hybrid module and other.

Every additional option is designed, developed and intensively tested inside Include, ensuring highest reliability and quality even in severe conditions after several years of usage.

Most of the additional options can be integrated into the bench even after the installation process. Any future developed additional options are also going to be compatible with previously installed Steora benches.

For more info please visit include.eu or scan the QR code.
Solos is an advanced Smart City dashboard which works as an operating system in a browser.

Just like on your computer, after logging in to Solos you get to the desktop page where you can explore all your existing applications. Each application controls a different product or same set of features from different products. Each time you buy a new product from Include with different features, new apps will appear on Solos desktop page and provide control to product features.

Thanks to Solos, cities and municipalities can now easily monitor every part of their public spaces – with just one platform.

With API integration key specific Solos data can be integrated in other applications or websites.

Each Steora bench comes with 5-years connectivity to Solos from the day of purchase.
Manage app now enables you to manage all your products at the same place in no time. Change product configurations, name, or any other setting in just a few simple steps.

Solos Setup app provides simple and fast administration of your profile, organization or products. With Setup app, you can easily manage your organization, user roles and user permissions.

Waste management app brings a revolution in managing waste. Using Waste management app, waste collecting companies can be aware of the exact waste level status in each Terra container and create the optimal route to collect waste from the entirely full containers.

Solos Sensors app provides real-time data from all connected products anywhere in the world. All collected information are presented in chart forms, with the option to see the data in custom time range. All the data can be exported in an .xls or .pdf format.

Support app provides all Include’s support in one place. Using Support app users can find information and manuals for products installation and maintenance, check their warranty status, report an issue, and even watch instructional videos.

New experience in managing DOOH ads. Create new campaigns, choose locations and duration in a few simple steps and you are ready to go. Thanks to our advanced AI camera module, you can now track info about pedestrians, such as the number of pedestrians walking or looking at the display, and even their gender. For the first time in DOOH, you can use filters to choose optimal locations for the audience walking in front of your displays.
The above shown technical drawings represent basic Steora models with additional options included – backrest and armrest. Additional options are purchased separately.
At Include, our mission is to give everyone a chance to experience public spaces in a new way, and no matter where you live, we want to make it the best and most rewarding experience ever. We are transforming public spaces in an unprecedented manner, to create modern, connected, self-sustainable environments incorporating new and exciting technologies that provide services to all.

Since a humble beginning in 2014, we have grown into a company present in 56 markets around the world, providing a range of remarkable products for public spaces and Smart Cities. Our global Retailers and Service Technicians Network covers your needs from day one, during the entire product life cycle. The quality of our products is not only proven by hundreds of customers around the world, but also by a variety of certificates, from the CE to the ISO 9001 standard.

Join our mission to make your cities and municipalities better places to live in.