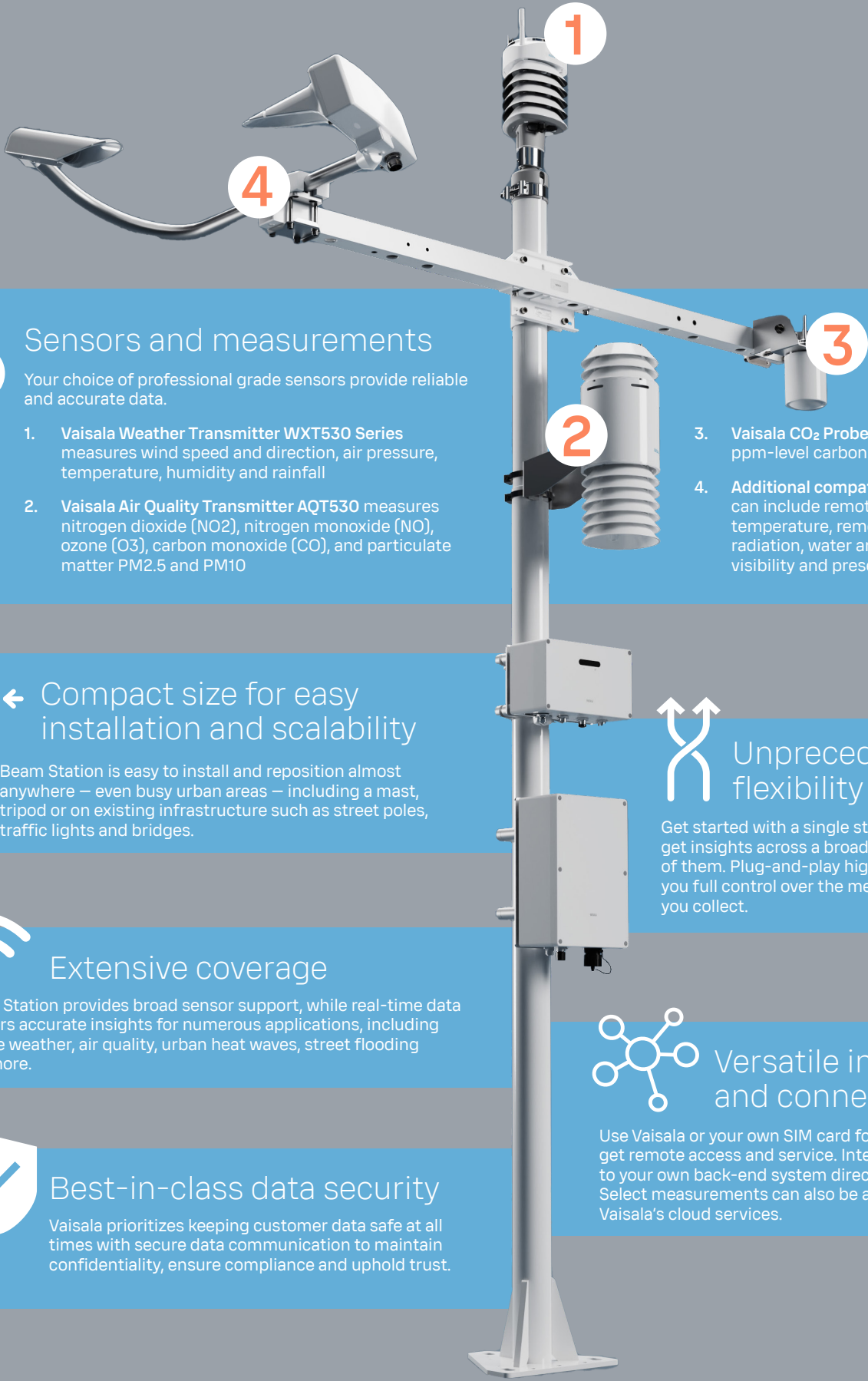


Beam Weather Station for urban and industrial systems

Gold-standard quality and flexibility from
the ground up

Vaisala Beam Weather Station BWS500 helps cities and industrial facilities take control of weather resilience, air quality monitoring, efficient operations and more. The compact Beam Station delivers comprehensive and precise measurements and insights to protect people and property from weather and environmental hazards.

Explore the ways this flexible, turnkey weather and environmental monitoring station provides the gold-standard measurements you need – wherever you need it.



Sensors and measurements

Your choice of professional grade sensors provide reliable and accurate data.

1. **Vaisala Weather Transmitter WXT530 Series** measures wind speed and direction, air pressure, temperature, humidity and rainfall
2. **Vaisala Air Quality Transmitter AQT530** measures nitrogen dioxide (NO₂), nitrogen monoxide (NO), ozone (O₃), carbon monoxide (CO), and particulate matter PM_{2.5} and PM₁₀

3. **Vaisala CO₂ Probe GMP252** measures ppm-level carbon dioxide (CO₂)
4. **Additional compatible sensors** can include remote road surface temperature, remote road state, solar radiation, water and snow depth, or visibility and present weather



Compact size for easy installation and scalability

Beam Station is easy to install and reposition almost anywhere – even busy urban areas – including a mast, tripod or on existing infrastructure such as street poles, traffic lights and bridges.



Unprecedented flexibility

Get started with a single standalone station or get insights across a broader area with a network of them. Plug-and-play high quality sensors give you full control over the measurements you collect.



Extensive coverage

Beam Station provides broad sensor support, while real-time data delivers accurate insights for numerous applications, including severe weather, air quality, urban heat waves, street flooding and more.



Best-in-class data security

Vaisala prioritizes keeping customer data safe at all times with secure data communication to maintain confidentiality, ensure compliance and uphold trust.



Versatile integration and connectivity

Use Vaisala or your own SIM card for connectivity, and get remote access and service. Integrate measurements to your own back-end system directly from the gateway. Select measurements can also be accessible with Vaisala's cloud services.