

**IRMA** FEATURE

EN

# Bicycle Counting

**iris** INFRARED  
INTELLIGENT  
SENSORS





# A wheel length ahead



Amsterdam (NL), Portland (OR USA), Copenhagen (DK), Boulder (CO USA), Davis (CA USA), Sandnes (N), Trondheim (N), San Francisco (CA USA), Berlin (D), Barcelona (E), Basel (CH) – what do these cities have in common?

Worldwide, they are considered to be bicycle-friendly cities.

In these metropolitan areas, bicycle traffic has almost doubled over the past twenty years.

The demand to take one's bicycle along on public transport, particularly on trains, is growing at the same sustainable rate as the bicycle traffic itself. For transit operators this requires the necessity to correctly estimate the demand for bicycle spaces on various methods of public transportation and to adequately respond to the demand.

With the **Bicycle Counting Feature** of the IRMA MATRIX, the state-of-the-art time-of-flight sensor for passenger counting, iris-GmbH, for the first time, provides transit operators with a tool for accurate estimation of required bicycle transportation capacity.

But that's not the only advantage of the system: Today's technologies enable the transmission of the actual availability of bicycle transportation capacities in real time. The real-time data can be accessed by cyclists, e.g., via their cell phone, while the capacity information feature can be managed and controlled by the transit operator.

If applied properly, bicycle allocation at transit platforms can be controlled in such a manner as to achieve an optimum distribution to available bicycle spaces.

The **Bicycle Feature** is a software that can be uploaded to the IRMA MATRIX sensor.

While the passengers continue to be counted in the well-proven quality, additional information about the number of bicycles counted can also be gathered. The data can then, according to chosen protocol type and settings, be sorted by bicycles taken onto the train by passengers as well as those removed from the train, and called up or received as required.

The interface is supported by IRMA API, and in the future will also be made available by the service-oriented protocol of standard VDV301, issued by the Verband Deutscher Verkehrsunternehmen (VDV, Association of German Transport Companies).

