People Counting System
For Stadiums

We have the accurate answer to your question:

"How many exactly?"

☑ Safety ☑ Security ☑ Crowd Control
☑ Revenue Control ☑ Stuff Management
☑ Authorities Regulations Compliance

System properties and benefits:

☑ Counting audience at real time from 'gates open' hour

☑ Counting all entries and all exits, and calculating the presents

☑ Counting results for each gate or stand, and for the entire stadium

☑ The system approved for UK stadiums by UK local authorities

☑ Allows working with various counting detectors: turnstiles, thermal, etc…

☑ Data transfer from field detectors by direct connection or by LAN or WIFI

☑ The computerized system allows real time event monitoring

☑ The system regularly checks occupancy of each stand and issues an alert when a stand reaches 95% of its maximum capacity

☑ A graphical view of each stand, as well as the entire stadium display

☑ Allows real time comparison of entries against tickets sold

☑ Enable "End of Game" printed report, with all important information, to be handed local authorities, club's managers, stadium office, etc.

☑ Also enable summary report of past events, holds entries rate and occupancy

☑ Saves all information for future use, and comparison of similar events

☑ Allows authorized users to view counting info at real time over the internet

☑ Allows future expansion of the counting system to an automated ticketing system

Example from Peterborough United F.C. stadium, UK

System's Components

❶ People Detectors:

The system can use many types of sensors to detect people:

| Full Height Turnstiles | Tripod Turnstiles | Thermal detectors | Side self reflect Sensors | Portable Lanes with sensors | As part of OTOT Access System |
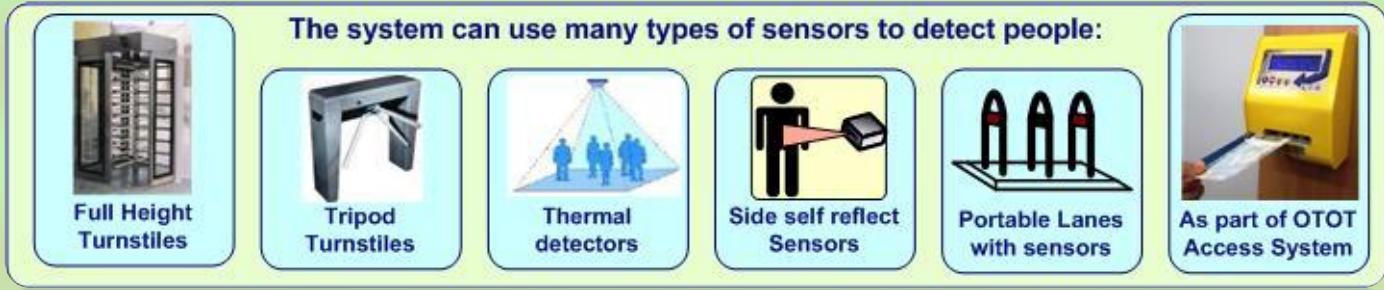
❷ Controllers and communication:

Otot dedicated **Counting Controller** is used to gather data from input sensors, Process that data, display the data, store is- and also transmit it to main server.

The sensors information to the Counting Controller is transfer in 2 ways:
①Directly: sensors to controller ②Indirectly: Using RS485 Data Collectors

The data from the controller to main server is transfer in 3 ways:
①Local Wired LAN: normal TCP/IP LAN in the stadium, 10Mb or 100MB
②Local Wireless: any standard wireless connection: WiFi, Access point, etc.
③Remote (cloud) processing: using direct connection from the controller
　　to remote web server. and from there. to anv PC. anvwhere. anv time.
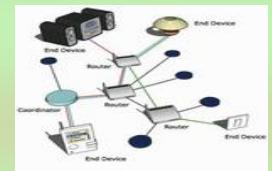
❸ Counting Software:

The **Counting Software Application** is running at the main server, which is located in the stadium control room, or at remote location...

1. That counting data is stored in SQL type Data Base
2. The event's details (date, hours, teams, etc. etc.), are also resident in the Data Base.
3. The software provide the following information, in real time, for each gate, and for the complete stadium:
    a. **How many** people entered, how many exit, **how many inside**
    b. **Rate:** what is the entry rate, according to last 10 minutes
    c. **Prediction:** According to last 10 minutes, when the stadium will be full?
4. **Event management:** Each event is stored in the database by name, date etc.
5. **History:** all relevant information from each event is stored, for future analysis if needed.
6. **Reports:** After each event, a specific report is done, to be given to local authorities.
7. **Display:** The information on the screen is by graphical layout of the stadium, or graphs, or tables, can be exported to Excel sheets. Also, it can be printed on paper when needed.