Catalyst RFID Smart Fitting Room

Interactive system for fitting rooms

Benefits:
Increases retail sales through up and cross selling
• Improves the customer shopping experience and is fun to use
• Generates information about user interests
• The frame colour and material can be customised
• The content and user interface can be remotely updated
• One master can be connected to 1, 2 or 3 slaves, reducing costs
• Narrow beam antennas
• Easy connection and installation

Product overview
Catalyst Smart Fitting Room is an RFID-based interactive system for retail fitting rooms.

Catalyst Smart Fitting Room uses RFID technology and a touchscreen to improve the shopping experience of customers.

The process is as follows:
1. The customer enters the fitting room with items to try on
2. The RFID subsystem of Catalyst Smart Fitting Room detects the items automatically.
3. The screen of Catalyst Smart Fitting Room shows images of the items, together with information such as colours and sizes available, price, etc.
4. The customer also receives recommendations of matching products and accessories.
5. The customer can interact through the touchscreen to request another size or colour, browse through other products etc.
6. When the customer requests another size or colour, an employee receives a message on a portable device and brings the product to the customer.

Catalyst Smart Fitting Room increases the sales by recommending matching products to complete ‘the look’.

Tel +44 (0)1494 45 30 45  Email info@catalyst-direct.com  www.catalyst-direct.co.uk
The content and user interface of Catalyst Smart Fitting Room can be remotely updated very easily via Catalyst Cloud cloud-based software. All events are registered and stored in Catalyst Cloud. This information can then be analysed for business intelligence purposes:

- Number of users entering the fitting room
- Number of users that interact with the screen
- Products that customers bring to the fitting room
- Recommended products selected by customers using the screen
- Products that customers request to be brought by an employee

Catalyst Smart Fitting Room comprises master and slave units. Up to 3 slave units can be connected to one master unit. Therefore 4 fitting rooms can be monitored with 3 slaves and 1 master.

The master unit comprises:

- RFID subsystem, with one reader, one directive antenna and suspending wires
- 21.5” touchscreen
- Screen frame
- Embedded computer
- Content and user interface management cloud-based software

The slave unit comprises the same elements but without a reader in the RFID subsystem.

The master and slave units can be installed suspended from the ceiling of each fitting room or above the ceiling, making it invisible.

The antenna used by the master and slave units is a compact antenna with circular polarization and a radiation pattern characterized by a high directivity both in the longitudinal and transversal direction. Thanks to its high directivity, each Catalyst Smart Fitting unit (either master or slave) detects the RFID tags located at its corresponding fitting room while minimising the detection of products located in neighbouring fitting rooms or in areas nearby.

Catalyst Smart Fitting Room also includes software algorithms for minimising cross-reads.

Tel +44 (0)1494 45 30 45  Email info@catalyst-direct.com  www.catalyst-direct.co.uk
## Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen size</td>
<td>21.5 inches</td>
</tr>
<tr>
<td>Touch screen technology</td>
<td>Projected capacitive</td>
</tr>
<tr>
<td>Operating frequency EU version</td>
<td>865.6 – 867.6 MHz (ETSI EN 302 208)</td>
</tr>
<tr>
<td>Operating frequency US version</td>
<td>902 – 928 MHz (FCC part 15)</td>
</tr>
<tr>
<td>RF power output</td>
<td>Adjustable from 5 dBm to 31.5 dBm (1.4W) with +/-0.5 dBm accuracy above +15 dBm Maximum power may have to be reduced to meet regulatory limits</td>
</tr>
<tr>
<td>Standard Compliance</td>
<td>EPCglobal Gen2 (ISO 18000-6C)</td>
</tr>
<tr>
<td>Radio Pattern</td>
<td>Pencil beam</td>
</tr>
<tr>
<td>Beamwidth</td>
<td>40° / 40°</td>
</tr>
<tr>
<td>Sidelobe level</td>
<td>&lt;-15dB</td>
</tr>
<tr>
<td>Antenna gain</td>
<td>9 dBi</td>
</tr>
<tr>
<td>Polarization</td>
<td>Circular</td>
</tr>
<tr>
<td>On board sensors</td>
<td>Ultrasound distance sensor</td>
</tr>
<tr>
<td>Data and control interface</td>
<td>RJ45 (10/100 Base-T Ethernet)</td>
</tr>
<tr>
<td>Connectors in the master unit to connect slave units</td>
<td>3 SMA female connectors</td>
</tr>
</tbody>
</table>
| Power supply                          | Screen: power supply on board
RFID subsystem: Power over Ethernet |
| Temperature range                     | -20°C to +50°C                               |
| Size of the screen                    | 700mm x 350mm 67mm
27.56 inches x 18.1 inches x 2.4 inches |
| Size of the RFID subsystem            | 460mm x 460mm x 60mm
18.1 inches x 18.1 inches x 2.4 inches |
| Weight                                | Screen: 10.3 Kg
RFID subsystem: 4Kg                     |
| Surface colour of the RFID subsystem  | Can be customized                            |

Tel +44 (0)1494 45 30 45
Email info@catalyst-direct.com www.catalyst-direct.co.uk