

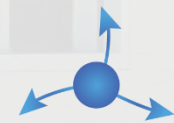
FORTECHO

SMART PROTECTION

Intelligent object-focused protection solutions for museums.

Enable **constant, centralised, wireless** monitoring of valuable paintings, wall hangings, free standing objects / sculptures, display cases and furniture.

24/7 MONITORING FOR:



MOTION



PROXIMITY



VIBRATION



LOCATION



TAMPER



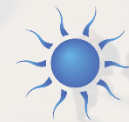
PRESSURE



TEMPERATURE



RELATIVE HUMIDITY



LUX

Rapidly detect theft and dangerous climatic changes using a variety of wireless sensors.

Most sensors are form-specific multifunctional **electronic tags***.



RFID Reader Infrastructure



Specialist Tags



PIR Sensors



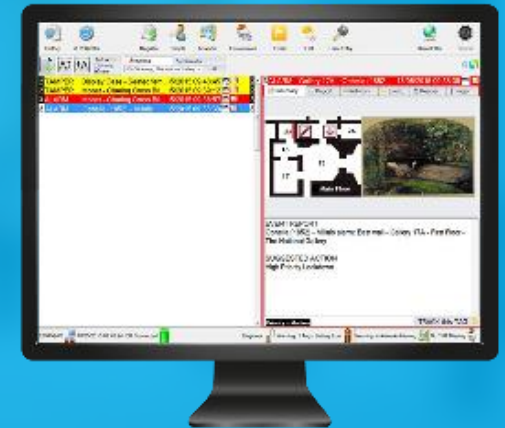
2D Lasers



3D Scanners

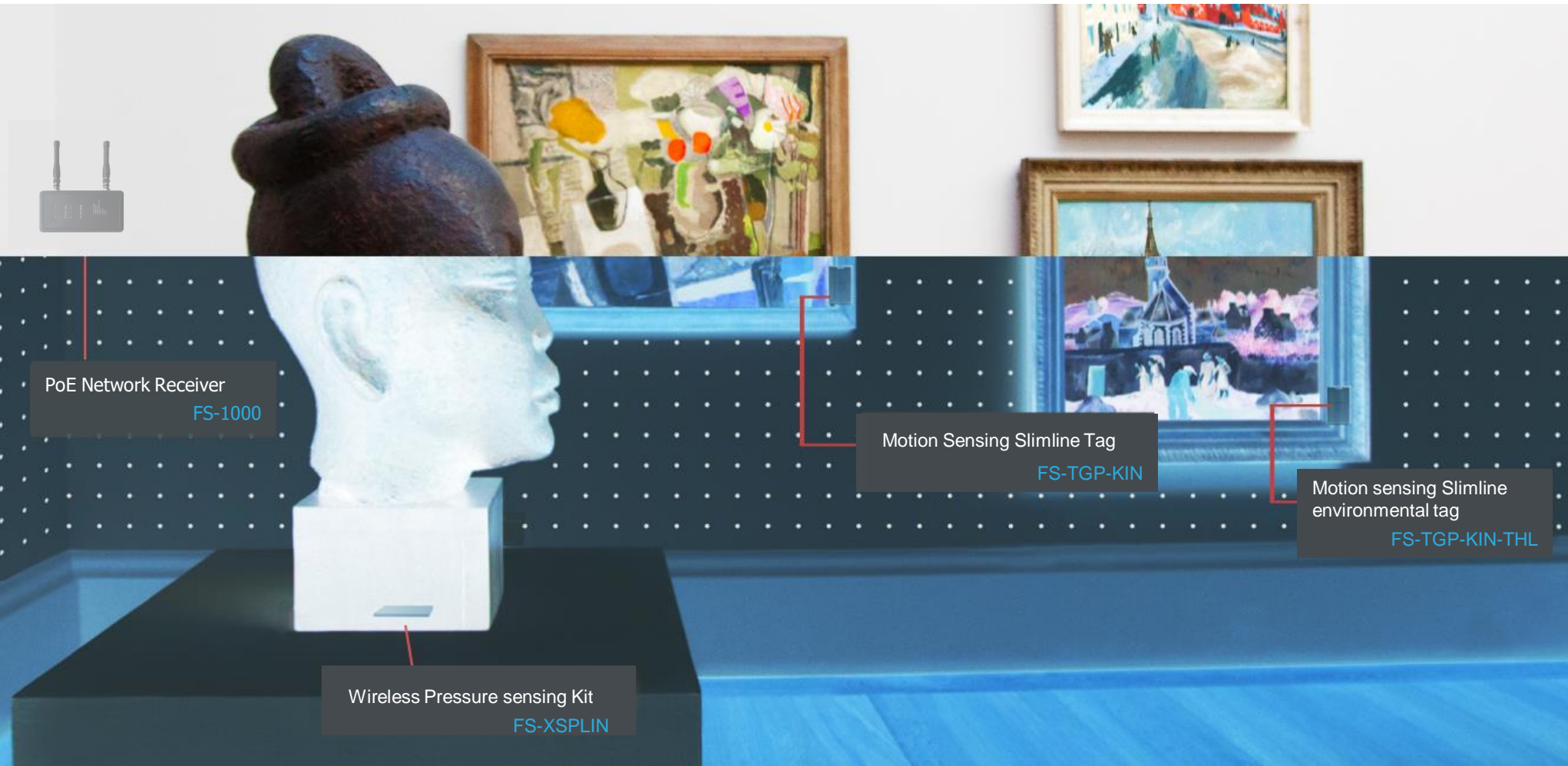


Pressure Sensors



Software

- INVISIBLE SENSORS CREATE THE BEST VIEWER EXPERIENCE.
- LONG SENSOR BATTERY LIFE REDUCES ART HANDLING.
- SIMPLE-BUT-SAFE SENSOR ATTACHMENT FOR EASE OF USE.
- FULLY INTEGRATED WITH ALL OTHER SECURITY SYSTEMS.



SOLUTION BENEFITS

- **MODULAR + EASY TO INSTALL.** Particularly useful in historic and other buildings where wired sensors are difficult to cable.
- **FLEXIBLE** – excellent for monitoring temporary exhibits private residences where artwork size, type and placement can change or vary
- **OPERATIONAL 24/7** - the solution provides an essential, extra level of object-focused security – *particularly important during daytime visiting hours* when intruder detection systems are turned off and objects are most vulnerable
- **INTEGRATES EASILY** with almost all security / management infrastructure including **Intruder Detection, CCTV, VMS, SMS, Pager, Email clients, and Digital Mobile Radio (DMR) Systems**
- **EVOLVING CONSTANTLY** with the assistance of some of the leading global art institutions and collectors
- **AVAILABLE IN DIFFERENT FREQUENCIES** – For the first time Fortecho is available in both 433 and 868 frequencies
- **OTA FUNCTIONALITY** it is now possible to program and change settings of the tags Over The Air

SYSTEM OVERVIEW

ACTIVE FORTECHO RFID READERS



ACTIVE FORTECHO RFID SENSORS



Used by **MUSEUMS, NATIONAL GALLERIES, PALACES, PLACES OF WORSHIP, OFFICES, EXHIBITION CENTERS, TRANSPORTERS, AUCTION HOUSES, PRIVATE COLLECTIONS & GALLERIES.**

Some notable museum clients include

- Hermitage, St Petersburg
 - The National Maritime Museum, London
 - The Whitney Museum, NY
 - Victoria & Albert Museum, London
 - Getty Museum, Los Angeles
 - The Science Museum, London
 - National Gallery, Washington
 - Courtauld Institute of Art, London
 - Royal Academy, London
 - Wallace Collection, London
 - Kensington Palace, London
 - Kew Palace, London
 - Hampton Court Palace, Surrey
 - The Munch Museum, Oslo, Norway
 - Hugh Lane Gallery, Dublin
 - Grand Palais, Paris
 - Musée du Quai Branly, Paris
 - Musée des Impressionismes, Giverny
 - Fondation de l'Hermitage, Lausanne
 - The National Gallery, London
 - Van Gogh Museum, Amsterdam
 - Hermitage, Amsterdam
 - Museo Thyssen-Bornemisza, Madrid
 - Picasso Museum, Malaga
 - Uffizi Galleries, Florence
 - The British Museum, London
 - Harvard Museum, Boston
 - Waddesdon Manor, Oxon.
 - Museum of Fine Arts, Boston
 - The Natural History Museum, London
 - Museum of Islamic Art, Doha, Qatar
 - Bahrain National Monument, Bahrain
 - Palace of the Emirates, Abu Dhabi
 - Art Gallery of Ontario, Canada
 - The Louvre Museum, Abu Dhabi
 - National Gallery of Australia
 - National Museum of Australia
- + Hundreds of Private Collections**



CORE RFID PRODUCT



RFID READERS

FS-1000 Reader with omni-directional antenna

Frequency:
433 & 868 MHz

Size: 160x80x40mm

Weight: 350g

Adjustable read ranges. Either serial or IP.



FS-TGAI-THL

Frequency:
433 or 868 MHz

Size:
38x34x13mm

Weight: 24g

For display cases & objects



FS-TGP-TH

Frequency:
433 or 868 MHz

Size:
81x46x4mm

Weight: 18g

For paintings, tapestries or furniture



FS-TGP-KIN & FS-TGPS-KIN

Frequency:
433 or 868 MHz

Size: IV 81x46x4mm

V 65x36x4mm

Weight: IV: 18g

V: 10g

For paintings, tapestries or furniture



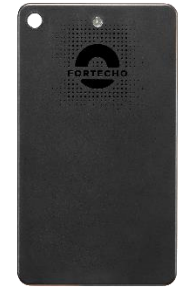
FS-TGF

Frequency:
433 or 868MHz

Size: 81x46x4mm

Weight: 18g

For security personnel to raise a silent location-specific alarm.



*Product images are not to scale

MICRO-CLIMATE TAGS



TEMPERATURE



LUX



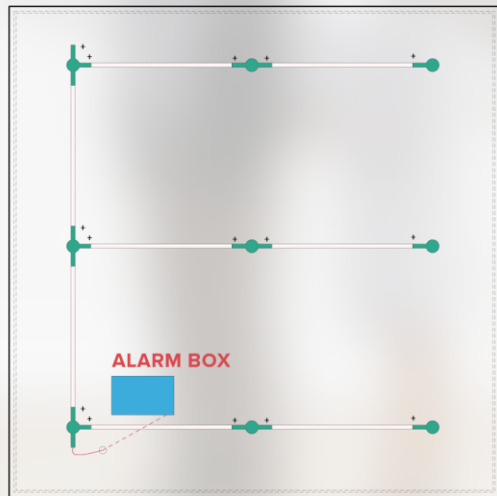
RELATIVE HUMIDITY



- Used to accurately monitor micro-climate within display cases, rooms, or ***at object level***.
- Temperature & relative humidity measurement accuracy
 - **Temperature** - T +/- 0.3°C with +/-0.1 repeatability.
 - **rH** - +/-2.0% with +/-0.1% repeatability.
 - **LUX** - +/-0.0036
- Simultaneously monitors for unauthorised open/close/tamper of show cases.
- Ultra low power consumption provides exceptional battery life
- Available in both TGP & TGAI* form factors.
- Low battery warning
- Beacon tag transmitting a unique ID & data at pre-set intervals as often as 60 seconds.

PRESSURE-SENSING KITS

- Piezo-electric pressure-sensing 'feet' sensitive to weight changes as low as 8g.
- Retro-fit onto/inside other surface tops.
- Useful for single or groups of objects.
- Appropriate for objects up to 150 kg.



VOLUMETRIC OBJECT SURVEILLANCE

INVISIBLE APPROACH / PROXIMITY PROTECTION FOR 2D + 3D OBJECTS



VOS

- Analyses changes of Infrared light reflectivity within a 3D volume surrounding objects.
- **Invisible** Volume intrusion detection
- Excellent variable light performance
- Aesthetic over-head mounting
- Multiple early alarm zones
- Integrates via relay tag
- Semi-automatic calibration

268 x268 x110mm

*Beam visible for illustration purposes.

2D LASER SCANNERS

PRECISE APPROACH PROTECTION FOR OBJECTS BEHIND A THRESHOLD



Pair with FT-S900
sounder for local
audible alarm

Protect against **vandalism, damage + theft.**

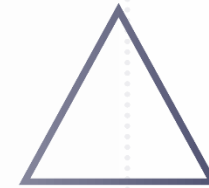
- Detection range up to 25m x 25m.
- Pre-Alert + Alarm based on proximity to object.
- Invisible curtains. No external illumination required.
- Min. target detection size 7cm @ 10m distance.
- Easy to retrofit and install. Self-learning of environment.
- Day/Night modes for controlling out of hours access to gallery spaces.
- Compact 270° model also available for central top-down monitoring with 10m field of view.



THIRD PARTY INTERFACES

Intelligent asset-protection solutions interface with leading **CCTV, Security Management (SMS), Video Management (VMS) & Intruder Detection Systems** including:

USA	Crestron, Seibold, Siemens, Lenel, Diebold
FRANCE	AppVision Prysm, Genetec, Belledonne (TELEM)
ITALY	Honeywell (Notifier)
UK	Cortech, Wavestore, SMC, FLIR United VMS
IRELAND	Synetics Synergy SMS, Niscayah
HOLLAND	Bosch BVMS, HiSec, Zenitel TETRA, Honeywell
UAE	Synetics, Synergy SMS
CANADA	Omnicast CCTV System
DENMARK	Milestone VMS



ADVANTAGES

- ✓ Bespoke design
- ✓ 24/7 surveillance of tagged artworks, display cases and galleries
- ✓ Audits each artwork 2880 times per day
- ✓ Self checks 200x /second
- ✓ Tracks and “fences-in” artworks on the move
- ✓ Low annual maintenance cost
- ✓ Centralised control for setting each object’s alarm thresholds, alarm rules, alarm exceptions and acquittal procedures
- ✓ Over the Air Progamable
- ✓ Essential tool for security guards, curators and registrars
- ✓ Minimises false approach alarms
- ✓ Highly scalable, modular and easy to install
- ✓ Flexible, user-friendly configuration modules
- ✓ Wireless ⇨ Easy and less costly to deploy
- ✓ Integrates easily with most 3rd party systems: Digital Radios, CCTV, Email, Sounders, SMS, VMS...
- ✓ Rapidly amortized cost
- ✓ Real time alarms >> Accelerates preventive actions
- ✓ Both 433 & 868 frequencies available
- ✓ **Trusted by hundreds of leading museums and galleries.**