



FAAST Beyond Standard Methods of Detection



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Agenda

- Introduction to Aspiration detection
- Aspiration Product Portfolio
- FFAST : Basic System
- FFAST : Product Features
- Advantages FFAST
- FFAST LT : Basic System
- FFAST LT : Product Features
- Advantages FFAST LT
- FACP Integration
- Sample BOQ
- Where to Pitch What

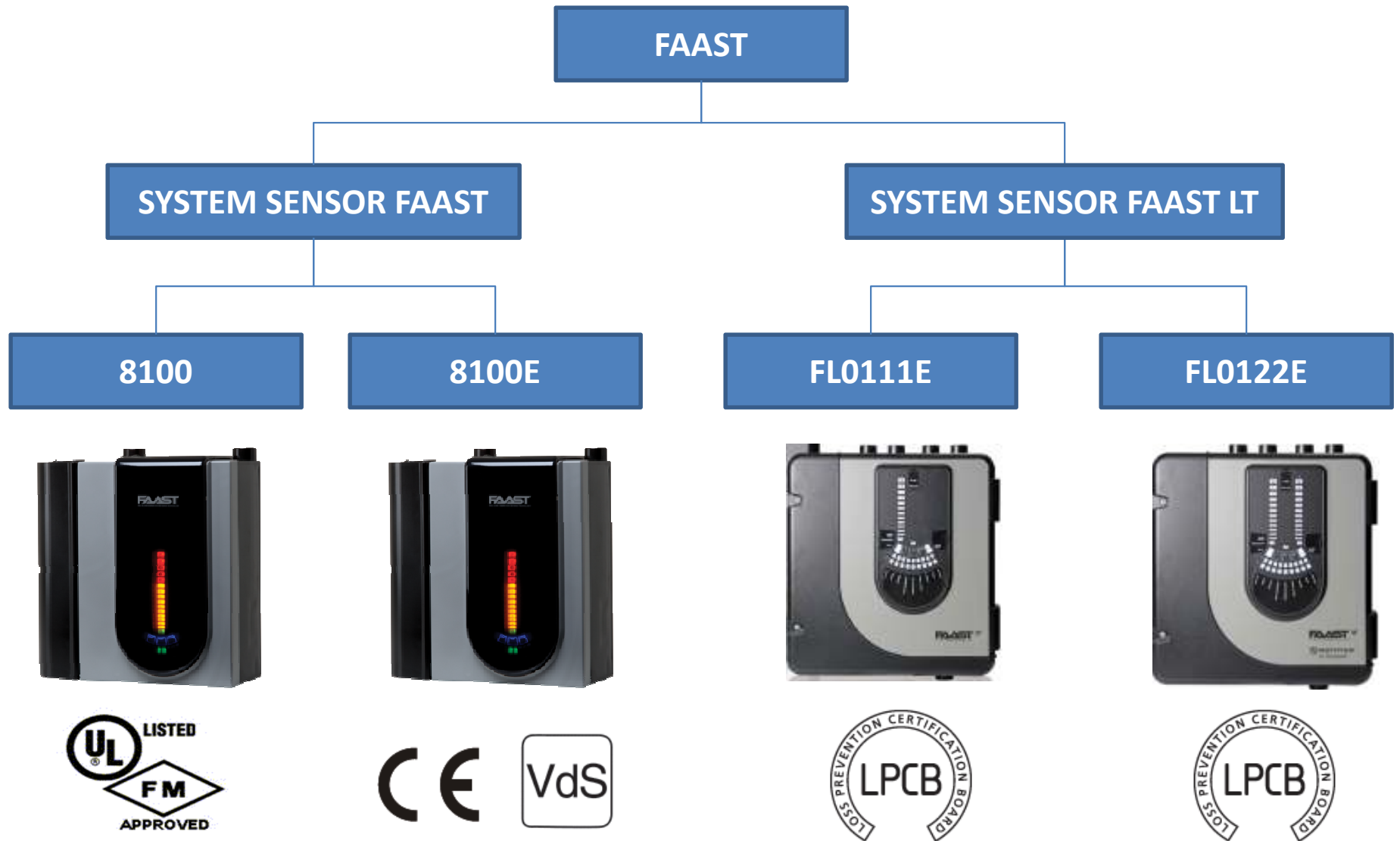
Aspiration Smoke Detection

- A standard Aspiration Smoke Detection system comprises - a high **sensitive smoke detector**, an air intake **fan** and a **network of sampling tubes** that constantly draw air from the target environment into the detector
- Works as a standalone detector or conventional detector when connected to FACP via a module.
- **Ultrasonic air flow sensing**

What?	Standard Smoke Detector	Aspirating Smoke Detector
Characteristic	Passive – waits for smoke	Active – pulls smoke towards itself
Sensitivity	0.5 to 3.43% Obs/m	0.0015% to 20.5% Obs/m
Coverage Area	Defined by spot detection area	Determined by aggregate pipe length and # of holes
Scope	Smoke detection in a normal environment/operating condition	Very early smoke detection in a difficult environment

When a standard smoke detector is not an optimum solution

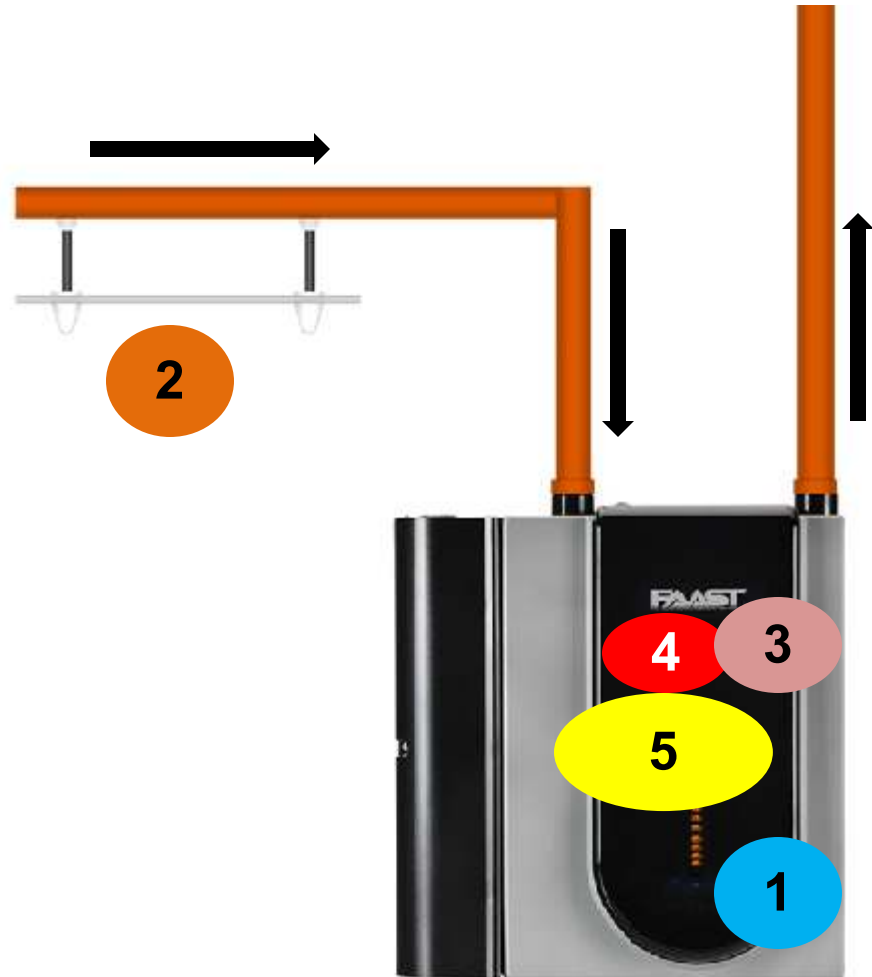
ASPIRATION PRODUCT PORTFOLIO



System Sensor : 30 years of smoke detection

FAAST : BASIC SYSTEM

- 1 → Aspirator or fan system
- 2 → Piping and sampling points
- 3 → Filter : Patented Particle Separator
- 4 → Filter
- 5 → Detector Chamber

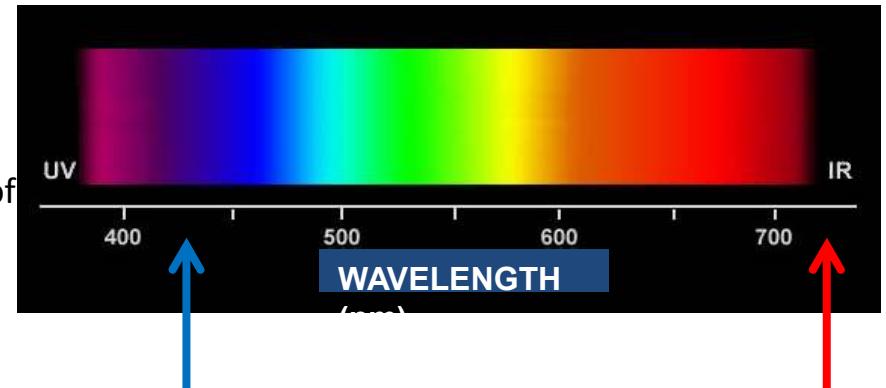


Launched in 2010; established credibility at a global level

FAAST : PRODUCT FEATURES

Dual Vision – BLUE and IR Laser

- IR Laser – distinguish dust from combustion particles
- **Blue LED – precision smoke detection**
- Detects a wide range of fire with consistent and high level of sensitivity.



Multi-Stage filtering

- Patented **particle separator removes larger contaminants** before they enter the detection chamber and filter
- **Extends** the life of the device

Sensitivity

- **FAAST** has an unsurpassed sensitivity of 0.0015 % obs/m.
- Protects critical assets from any damage.



Other Key Features

- **Single Pipe Single Zone System**
- **Networking of detectors** : Onboard TCP/IP.
- **Seamless BMS Integration** : Onboard Modbus
- **Notification** : 5 relay output along with email notification to customer via onboard TCP/IP.

Model No	8100	8100E
Coverage Area (Sq m)	743	2000
Certification	UL/FM	VDS, CE
# of Holes	36	36

Launched in 2010; established credibility at a global level

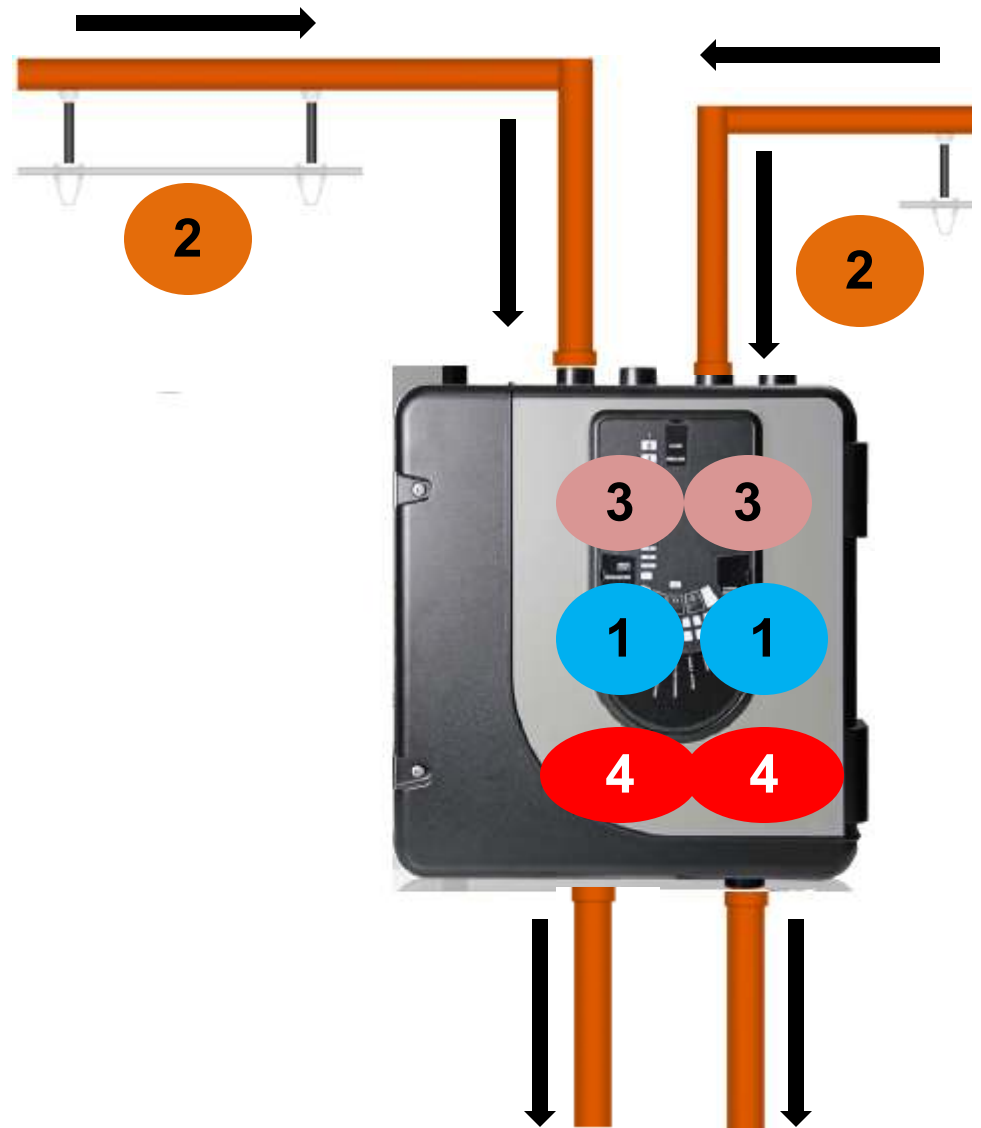
Advantage FFAST

What?	Brand V	FAAST 8100/8100E	Implications
Technology	Laser Only	BLUE LED + Laser	 Competitive Advantage
Additional Hardware - for BMS	Yes	No	Savings on high end network interface \$\$ 😊
Additional Software – for notification via mail	Yes	No	Savings on Software purchase \$\$ 😊
Filtration	2 stage	3 stage	 Competitive Advantage

FAAST : Advanced Detection Technology

FAAST LT : BASIC SYSTEM

- 1 → Aspirator or fan system
- 2 → Piping and sampling points
- 3 → Filter
- 4 → Detector Chamber



Launched in 2014

FAAST LT : PRODUCT FEATURES

Detection Technology – Laser

- Laser detector : high sensitivity to combustion particles, early warning for fire
- Sensitivity : 0.07 % obs/m.

Two Pipe Two Zone aspiration detector

- Gives **individual** alarms for both zones.
- Best suited for ‘faster’ standard detection in large areas with multiple voids.

Protection even in Rugged conditions

- IP rating of IP65
- Protection against fire in harsh environments which are not subject to heavy airborne dust particles.

Model No	FL0111E	FL0122E
Coverage Area (Sq m)	1600	2000
Certification	LPCB	LPCB
# of Channels	Single	Dual

FL0111E





Class of Protection	# of holes	Total Coverage area (Sq m)
Class A	6	150
Class B	12	600
Class C	32	2000

FL0122E

Class of Protection	# of holes	Total Coverage area (Sq m)
Class A	3	75
Class B	6	300
Class C	16	1600

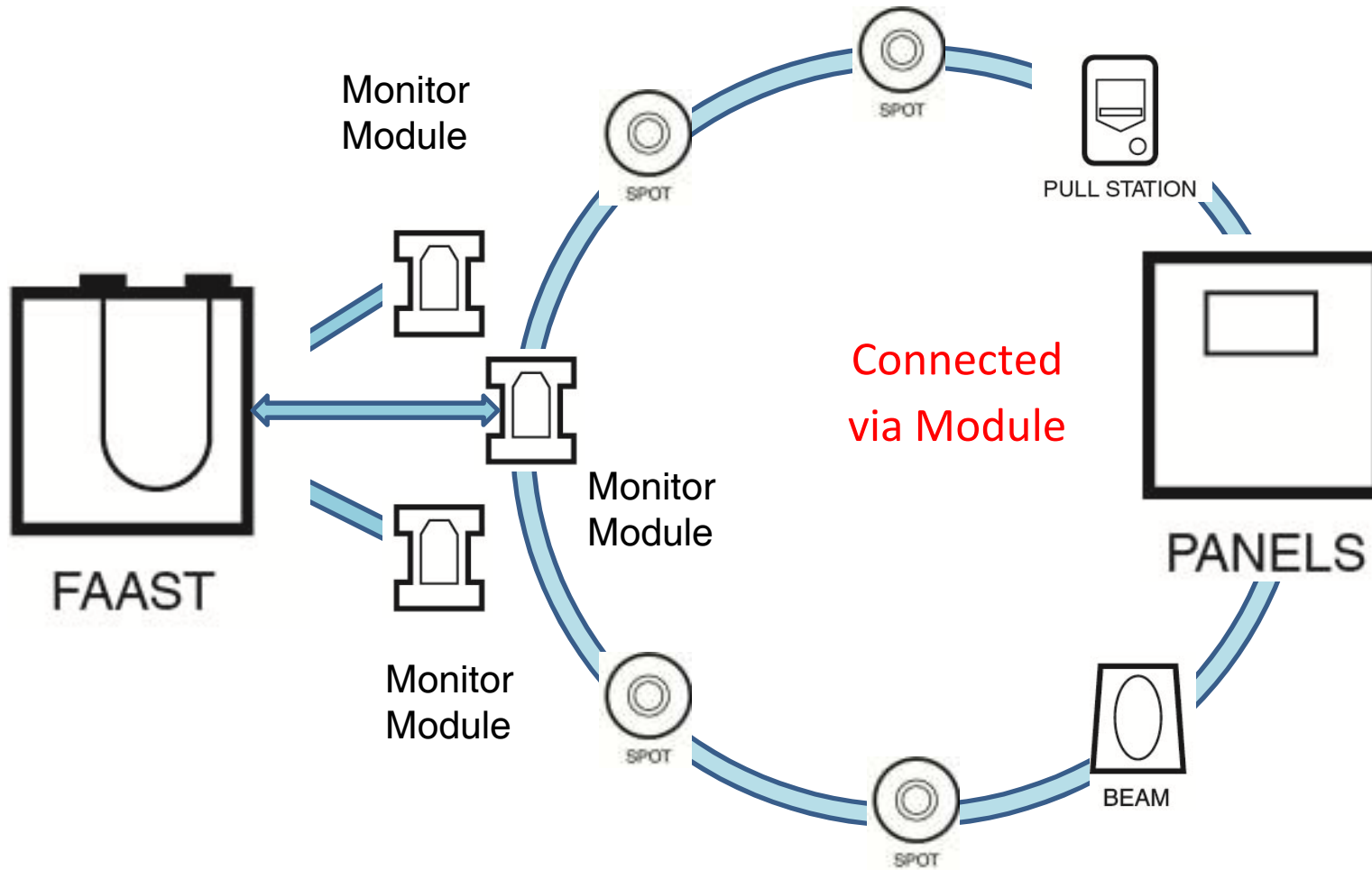
Launched in 2014 ; mid market aspiration detector

Advantage FFAST LT

What?	Brand V	FFAST LT FL0111E/FL0122E	Implications
Technology	Laser	Laser	 On par with competition
Channel level addressability	No	Yes	 Individual alarms for both channels
Detection : Large areas	No	Yes	 'Faster' standard detection
Robust	No	Yes	 IP65

FFAST LT: Aspiration detector for mid market

FACP Integration



Integration via modules : Alarm + Fault displayed on FACP

SAMPLE BOQ

System Sensor FFAST						System Sensor FFAST LT					
Description	Model No	Quantity	Description	Model No	Quantity	Description	Model No	Quantity	Description	Model No	Quantity
FAAST Detecor	8100	1	FAAST Detector	8100E	1	FAAST LT Detecor	FL0111E(1	FAAST LT Detecor	FL0122E(1
Power Supply	PS-24V-2A/	1	Power Supply	PS-24V-2A/	1	Power Supply	PS-24V-2A/	1	Power Supply	PS-24V-2A/	1
Flush Capillary Sampling Point	02-1008-15/	Based on Design	Flush Capillary Sampling Point	02-1008-15/	Based on Pipe Layout	Flush Capillary Sampling Point	02-1008-15/	Based on Pipe Layout	Flush Capillary Sampling Point	02-1008-15/	Based on Pipe Layout
End Cap	02-1006-25/	Based on Design	End Cap	02-1006-25/	Based on Pipe Branching	End Cap	02-1006-25/	Based on Pipe Branching	End Cap	02-1006-25/	Based on Pipe Branching
ABS/ CPVC Pipe		Based on Design	ABS/ CPVC Pipe		Based on Pipe Layout	ABS/ CPVC Pipe		Based on Pipe Layout	ABS/ CPVC Pipe		Based on Pipe Layout
Design Software	Pipe IQ	Free	Design Software	Pipe IQ	Free	Design Software	PipeIQ LT	Free	Design Software	PipeIQ LT	Free

Where to Pitch What

Category	Applications	8100	8100E	FL0111E	FL0122E
Mission Critical	Datacenter	✓	✓		
	Clean Rooms	✓	✓		
	Telecom Switch Rooms	✓	✓		
	Process Control Rooms	✓	✓		
	Semi Conductor Fabrication Facility	✓	✓		
	Small Office Server Rooms	✓	✓	✓	✓
	UPS Rooms	✓	✓		
	Battery Rooms	✓	✓		
Discrete Detection	Museums	✓	✓	✓	✓
	Religious - Church/Temple/Mosque	✓	✓	✓	✓
	Historic Structure	✓	✓	✓	✓

Where to Pitch What

Category	Applications	8100	8100E	FL0111E	FL0122E
Harsh Environments	Textile	✓	✓		
	Cold Storage	✓	✓		
	Tobacco Processing	✓	✓		
	Chemical Plants	✓	✓		
	Warehouses	✓	✓	✓	✓
	Railway Coaches	✓	✓		
	Airport	✓	✓		

FAAST : Customer Case Studies

KOLKATA INTL AIRPORT. KAIA, SAUDI



- Total Units Installed – 600 at Kolkata and 400 at Saudi

MANUFACTURING



**BRITISH AMERICAN
TOBACCO**

- Total Units – 165
- Tobacco Products – Harsh Environment

DATA CENTERS



- 2012 & 2013
- Total Units Installed – Over 200 units



ASSET PROTECTION



- Abu Dhabi Presidential Palace
- Total Units installed – 100

No 2 in less than 4 years of introduction

FAAST Support



Aspiration Solution Design Support

- **STEP 1**
Bill of Material
- **STEP 2**
 - Pipe Layout
 - Flow reports



Technical and Warranty Support

- Technical support at national level.
- Addresses all your needs for training, commissioning, warranty support and service.

Dedicated Team

1. Vikrant Sharma – Technical Manager
2. Chinab Aggarwal – Customer Marketing Manager – FAAST
3. Vinayendra Jain – Sr Product Manager – Sensors and Devices

Global Company, Local Support



Thank You