

# POB Bridge Portal With 'Traffic Light' Control



ATEX Certified for use in  
Zone 1 Hazardous areas

## S3 ID

When it comes to understanding all aspects and issues relating to personnel and asset tracking, POB, mustering and personnel management solutions one company stands out from the rest - S3 ID.

S3 ID provides complete location awareness solutions and is the manufacturer of the acclaimed S3 range of products. The product range name, S3, is derived from three words which apply to everything we provide; Safe, Secure, Solutions.

### The importance of knowing POB

It is clearly important for you to know where your personnel are when it counts. Drills, evacuations and search and rescue during an incident can all benefit from S3 ID's experience in the real world. Proven procedures and knowledge combine to enable you to get the information you need in real time without the need for complex procedures.

Our personnel systems provide the ability to automatically and continually reconcile your installations Personnel On Board (POB) count in real time. As a result, not only can you immediately access a comprehensive POB muster list, but you can also use our system to warn your staff (again in real time) if their presence risks them exceeding the maximum POB for a given installation. To do this we use our unique personnel 'traffic light' alert system as they cross a bridge and pass our portal sensors as shown in the illustration above.

### Giving the Green Light for Safety

Should an emergency occur you need to be confident at all times that the full compliment of POB can be safely evacuated using the facilities available since evacuating across a bridge link to a 'safe area' may be impossible. As such the maximum POB for a given offshore installation is set by the amount of seats available on that installations emergency evacuation facilities (lifeboats). Our simple, visual and highly effective 'Traffic light' system automatically ensures your maximum POB is not exceeded – and can generate an alarm if its warning is ignored.

As a member of personnel passes the bridge portal their unique RFID tag is read by the system along with the direction in which they are going – i.e., whether they are entering or leaving the installation. Their identity is captured by the system and the installation POB count automatically updated. This is then compared against the maximum allowed POB number.

If the person is entering the facility they will see in front of them a 'traffic light'.

If the system calculates that the maximum POB count for the installation they are about to enter is not exceeded by their presence, then this will light 'Green' to advise that it is safe to proceed. However, if their presence brings the total POB over the safe limit, then the yellow light will 'flash' cautioning them that they should not proceed further and leave.

A range of lights are offered. Standard 'traffic lights' are Exe' filament' type. Long life IS LED traffic lights are also available as an option. A red light may be substituted for the yellow if preferred in the 2-light configuration or 3-light (Red, Yellow, Green) semaphores supplied as a further option.



## Technical Specifications

### Principal System Components



#### Wrist Transponder

RFID Tag worn by persons when offshore: communicates a unique two part 64 bit number when it enters an antenna field.

#### Specification

Type:	Wrist Transponder Type TC5
Material:	ABS with polycarbonate label
Colour:	Black Housing
Dimensions:	37 W x 46 H x 10 D
Weight:	12 g
IP Protection:	IP66
Ex Certification:	EExia IIC T6 (Ta<60°C)
Mounting Details:	Tag supplied complete with adjustable wrist Strap
Communication:	RFID
Temperature Range:	-20°C to +60°C:

#### Universal Tag Reader Unit with 'Traffic Light' Display Driver

The reader unit electronics and 'Traffic Light' display driver are housed within a stainless steel enclosure. The unit is ATEX certified for operation in Zone 1 hazardous areas. To facilitate installation and maintenance the enclosure is split into two sections an IS section housing the electronics with an adjoining Exe chamber reserved for power, traffic light and antenna connections.

Data read from the transponder tags carried by personnel is then transmitted by the reader to the central system servers via high speed high integrity, intrinsically safe CAN bus. Dependent on the reply received, the appropriate semaphore is lit.



#### Specification

Type:	Hazardous Area Portal Controller (Universal Tag Reader)
Material:	2.0 mm Stainless Sheet Grade 316 L
Colour:	Steel Grey / passive external electroplated
Dimensions:	372 W x 560 H x 156 D
Weight:	33 Kg
IP Protection:	IP66
Ex Certification:	Eex ib e w IIB T4
Mounting Details:	4 x M12 fixing holes
Cable Entry:	M25 Glands for Power, Communications & Antennae
Power Requirements:	230 V AC / 40 W
Temperature Range:	-20°C to +60°C

#### S3 ID Group

Bow Bridge Close, Templeborough, Rotherham, S60 1BY, United Kingdom | T: +44 (0)1709 782400

Jättåvågveien 7, PO Box 130, 4065 Stavanger, Norway | T: +47 51 80 11 90

1 Lorong 2 Toa Payoh #02-02 Yellow Pages Building, Singapore 319637 | T: +65 6838 0260

Taugul 27, apt 115, 050042, Almaty, Kazakhstan | T: +7 70755 54367

W: [www.S3-ID.com](http://www.S3-ID.com)

© S3 ID Group 2013: Datasheet No: S3ID eLocator 005v4 Bridge Portal Traffic Light

