

RFID



PRESENTS

**THE JANUS* GATE:
RFID TERMINAL SYSTEM FOR CONTAINERS**

*Mythological god with two heads who looks to the past and future and symbolizes gateways and transitions



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&

RFID NEPTUNESAL *
CONTAINER BOLT SEAL



*god of the sea

THE JANUS-GATE : RFID TERMINAL SYSTEM FOR CONTAINERS



THE JANUS-GATE :
An RFID system for automatically reading
RFID container security seals covering
multi-lanes.

EASY TO SET UP AND
COMPATIBLE WITH ALL
TERMINAL MANAGEMENT
SYSTEMS

THE JANUS-GATE : RFID TERMINAL SYSTEM FOR CONTAINERS

3



“THE JANUS-GATE: UHF PASSIVE RFID GATE SYSTEM” is an «all-in-one» RFID UHF - ISO 18000-6 (EPC Global) system designed specifically to monitor and manage the movement of containers that pass through it. It is able to monitor in a reliable and secure way the RFID Seals applied to the containers and can **even identify the individual lanes**.

“THE JANUS-GATE: RFID PASSIVE GATE SYSTEM UHF” is made up of a reader and two antenna that are capable of reading the RFID seals regardless of their position or conditions.

- 1.) **RFID SEALS** applied on the upper handles of the container
- 2.) **RFID SEALS** applied on the lower handles of the container
- 3.) **RFID SEALS** applied on the left or right hand side of the container
- 4.) **RFID SEALS** applied to containers positioned with the doors towards the lorry's cab
- 5.) **RFID SEALS** applied with the doors facing the opposite end of the lorry's cab.



THE JANUS-GATE : RFID TERMINAL SYSTEM FOR CONTAINER

4

EPR FAST LANE STATION



"THE JANUS-GATE: UHF PASSIVE RFID GATE SYSTEM"

Is an RFID UHF - ISO 18000-6 (EPC Global) able to read all types of RFID seals (from any manufacturer)

The gate is managed by the **EPR FAST LANE STATION** system .



NEPTUNESEAL RFID

For every lane the **"JANUS-GATE: RFID GATE PASSIVE SYSTEM UHF"** can read up to 2 RFID SEALS on the container that passes through it

The system can also read up to 4 RFID-SEALS with the aid of a special optional firmware

The average reading distances are: 6 m / 8 m

Additional Optional Kits:

- Kit TEMP: kit designed for operating at - 40 ° C a + 75 ° C
- Kit LED Alert: for local alerts using high intensity LED and a loud buzzer

Main technical features

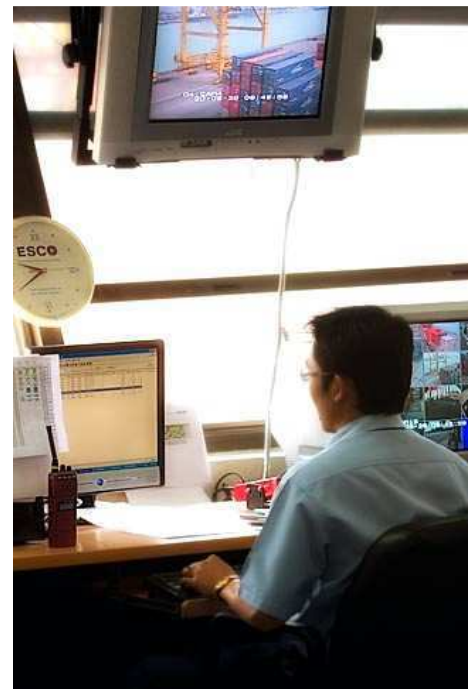
"THE JANUS-GATE: RFID GATE PASSIVE SYSTEM UHF"

- A.**)Advanced Detection Algorithm , for the accurate and efficient reading of the seals that pass through the gate
- B.**)Lane Detection Firmware for identifying and reading of seals in adjacent lanes
- C.**)Auto setting capability, for improving the readings regardless of the environmental conditions
- D.**)Fast Mounting, for easy servicing set up and installation
- E.**)Fault Tolerance Management System , for 24 hour continuity and service operations (optional)

"THE JANUS-GATE: RFID PASSIVE GATE SYSTEM UHF"

Furthermore the system is able to support special configurations such as reading two RFID seals applied on two containers traveling on the same trailer.

(in this situation the two containers should be positioned with the two doors opposite each other with a distance between them of at least 1m.)



THE JANUS-GATE : RFID TERMINAL SYSTEM FOR CONTAINERS

Main hardware Characteristics

“THE JANUS-GATE: UHF PASSIVE RFID GATE SYSTEM”

Operating Frequency : 865-869 MHz, ETSI EN 302-208

Operating Protocol: ISO 18000-6C; EPC Class1 Gen2;

Antenna: Special embedded antenna system

RF Power: Programmable via software up to +32.5 dBm (up to +30dBm if used with POE)

Reader power: POE IEEE802.3 or 24 Vdc, 0,8A via an external power source

Network power: 100-240 Vac, 50/60Hz

Communication ports: Ethernet 10/100 Base-T Ethernet (RJ45); RS232, USB2.0

Sensors / External photocells for trigger signal

Configuration address DHCP, Static, LLA + mDNS

Environmental conditions:

- Operating Temperature: -20°C + 50°C
- Stock Temperature: -20 °C +60 °C

Basic Dimensions : 300 x300x100 mm

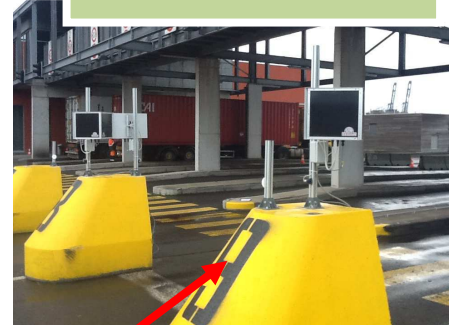
Weight: 3000 g

Certification: CE (FCC can also be supplied on request)

Housing: Metal and ABS

Waterproofing: IP65

EPR FAST LANE STATION



RFID NEPTUNESAL FOR CONTAINERS

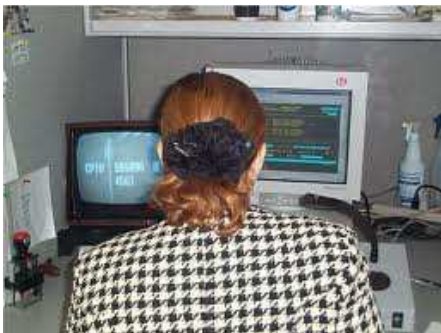


Management software per

“THE JANUS-GATE: UHF PASSIVE RFID GATE SYSTEM”

The Management Software allows the RFID gates to be monitored and operated easily by the control staff. The main pieces of data that the system can manage are:

- ✓ serial number of the RFID container seals
- ✓ identification of the gate
- ✓ identification of the lane
- ✓ date and time of the reading
- ✓ number and reading of each individual RFID container seal
- ✓ Take a sequential reading where a container is sealed with two seals or where there are two containers on the same trailer
- ✓ the state of the security seal (e.g. TAMPERED / NOT TAMPERED) valid for the containers fitted with the RFID NEPTUNE SEAL **Anti tamper** with special software .(optional)
- ✓ generation of log file



The Management Software for “THE JANUS-GATE: UHF PASSIVE RFID GATE SYSTEM” can be installed on any PC or SERVER that uses WINDOWS. To connect the PC with the Management Software and the “JANUS-GATE: UHF PASSIVE RFID GATE SYSTEM” a LAN network Ethernet TCP/IP connection is required .

The “JANUS-GATE: UHF PASSIVE RFID GATE SYSTEM” system can also be integrated with existing IT systems and structures.

“THE JANUS-GATE: UHF PASSIVE RFID GATE SYSTEM UHF”

is compatible with the following Leghorn RFID seals :

- NEPTUNE SEAL RFID Standard**
- NEPTUNE SEAL RFID Anti-tamper**
- TITAN Seal RFID**
- Fork SEAL RFID**
- CABLE LOCK SEAL RFID**

6

ISO
17712: 2010



DESCRIPTION:

°NEPTUNESEAL is the first bolt type seal of its kind ISO/PAS17712: 2010 approved, with the internal metal part exceeding 18 mm.

Our innovative (pat. pending) design is characterized by two metal tabs attached to the bolt, which slot securely into the closure canal of the "female" part of the seal.

This amendment to the traditional bolt seal design, requested by the new ISO norms, means it is no longer possible to tamper the "female" part of the seal by spinning it at high speed.

Any Tampering attempt will damage the seal leaving it irreparable.

NUMBERING AND CUSTOMISATION:

- LASER printing
- Sequential numbering up to 15 figures
- Bar-code option
- Customisation up to 20 characters on one line
- Client logo on request
- For substantial orders it's possible to recreate company logo in relief

MATERIAL: Plastic parts: polystyrene / ABS in accordance with: **Restriction of Hazardous Substances (RoHS)** listed in the European Directive 2002/EC.

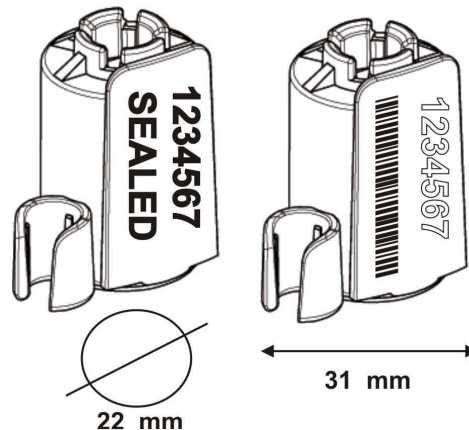
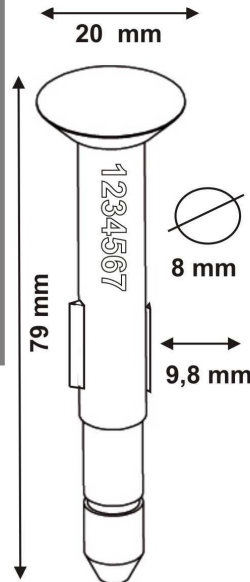
CERTIFICATES: Compliant with ISO/PAS 17712:2010 HSS (high security seal) ISO/PAS 17025 LAB APPROVED

AVAILABLE COLOURS



PACKING:

50 seals each carton
Carton size :32x25x15cm
Carton weight: 3 kg



RFID UHF NEPTUNESEAL TECHNICAL SPECIFICATION

RF protocol	EPC Class 1 Gen2 – ISO/IEC 18000-6C
Integrated Circuit(IC)	NXP V-Code G2iL
Memory	128 bit EPC
Operating Frequency	860 – 960 MHz - UHF EPC Global
Protection	IP66
Operating temp.	-30°C to +80°C
Storage temp.	-30°C to +80°C
Tag dimension	mm 30x100
Reading distance:	Typical reading with handheld reader : 0.5 – 1.50 m Typical automatic reading with gate