

TECHNICAL SPECIFICATIONS

Safety Approvals		
IECEX	Ex d ia [ia Ga] [ib Gb] IIA T4 Gb	IECEX ICS 16.0006X
NEPSI	Ex d ia ib IIA T4 Ga/Gb	GYJ16.1373X
Environmental		
Operating Temperature	-20°C to +60°C (Standard Temperature Version) -40°C to +60°C (Extended Temperature Version)	
Protection Class	IP65	
Materials		
Enclosure	Cast Aluminium, Alodined and Powder Coated	
User Interface		
Keypad	Customised 16 key, Alpha Numeric, Stainless Steel, Vandal Proof	
Display	2 X 3.5" LCD Screens, 240X160 Resolution	
Connections		
Cable Entries	3 X M20 X 1,5 Intrinsically Safe Gland Entries (Exi) 4 X M20 X 1,5 Flameproof Gland Entries (Exd)	
GSM Entry	1 X M16 X 1,5 Flameproof Bush (Exd)	
Electrical		
Input Voltage	24 VDC	
Battery Backup	Lithium-Ion 18V 2200mA/h (Fuse Protected & Encapsulated)	
Inputs	16 X Exi 2 Wire Retain Wet/Dry Optic Inputs 24 X Exi Namur Proximity Inputs 2 X Exi General Purpose / Namur Inputs 1 X Exi General Purpose Input	
Output	1 X Exi General Purpose Output 1 X Exd 24VDC / 18VDC Power Output (Battery Backed-up)	
Overfill Interface	12 X 5-Wire Overfill Sensors (EN13922)	
Communication Ports	1 X Exd RS485 / RS232 1 X Exd GSM / RS232 1 X Exi CAN BUS (Sensor Interface) 1 X Exi 1-Wire Bus (SHA iButton Interface)	
Protocols	CAN Open NEMA SHA iButton	
Sensor Interface		
Max of 30 Nodes:	API-400 (API Adaptor Open/Close, Wet/Dry) BVS-100 (Bottom Valve Open/Close) MAN-400 (Manhole Open/Close) REF-400 (GPS + Inclination) RIO-200 (Remote Input / Output Interface. E.g. Pneumatic Control)	
Data Storage		
Storage	12Mbyte Non-Volatile Memory (Stores up to 200 000 events)	
Weight		
Weight	7kg	

API-400, MAN-400, BVS-100, REF-400

Safety Approvals		
IECEX	Ex d ia [ia Ga] [ib Gb] IIA T4 Gb	IECEX ICS 15.0009X
Environmental		
Operating Temperature	-40°C to +60°C	
Protection Class	Encapsulated Electronics, IP67 Connectors	
Materials		
Enclosures	Machined Aluminium, Anodised (API-400, MAN-400, BVS-100) Polyester (REF-400)	
Interface		
	CAN BUS	
Functionality		
API-400	Optic Sensor for wet/dry detection + Inductive Proximity Sensor for open/closed detection of the API adaptor	
MAN-400	3 Axis Accelerometer for open/closed detection of the manhole	
BVS-100	Hall Effect Sensor for open/closed detection of the bottom valve	
REF-400	3 Axis Accelerometer for inclination detection of vehicle + GNSS Module for time date and location recording of events.	

SEALED PARCEL DELIVERY SYSTEM



Metermatic SCS-400



Metermatic



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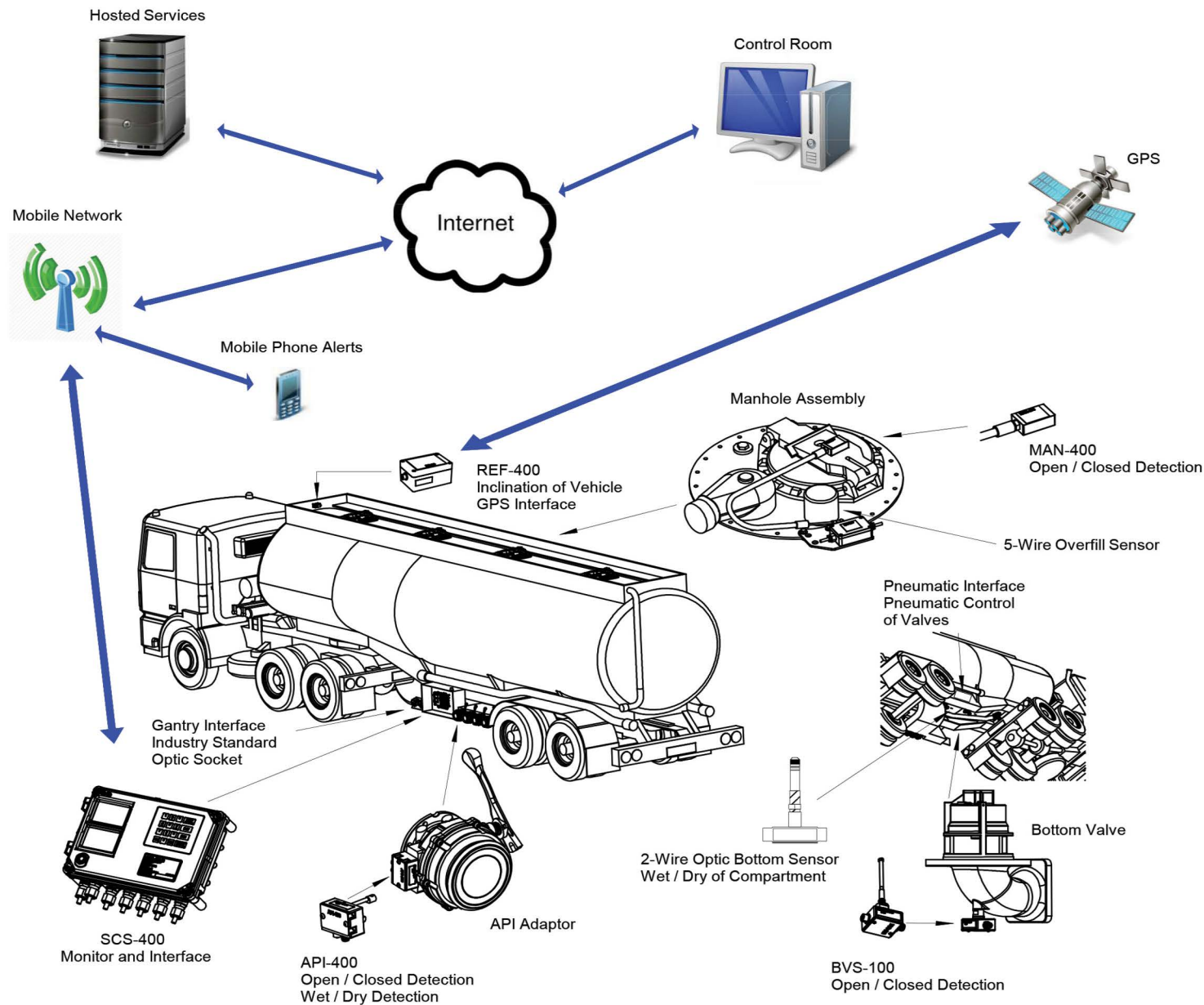
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SYSTEM COMPONENTS



SCS-400

The New SCS-400 Sealed Parcel Delivery (SPD) system secures your fuel from disconnect of loading coupler to delivery point in accordance with EN15208.

System operation is as follows:

- **Compartment status confirmed as EMPTY prior to loading.**
- **Compartment status changed to SEALED after loading (Top or Bottom loading)**
 - o Seal status is monitored in transit.
 - o Unique non sequential seal number allocated to each compartment.
 - o Seal status is monitored for up to 72 hours when disconnected from main power (Pre-Load)
 - o Offloading outside an authorized geo-fence is flagged and an alert is immediately sent.
- **Compartment confirmed as SEALED prior to off-loading.**
- **Compartment confirmed as EMPTY after off-loading.**
- **Frustrated delivery handled by resealing of compartment.**
- **Detailed trip reports are available on www.scsanalyser.co.za**

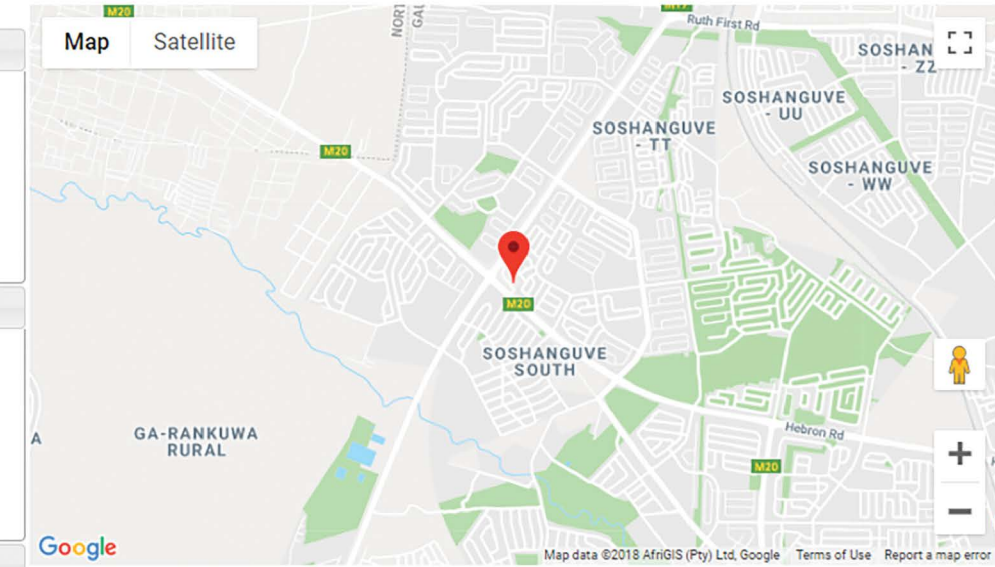
HOST SYSTEM

Real Time Information

Vehicle Registration :
 Status : Connected
 Time Updated : 2018/08/29 09:02:07
 Speed : 0 km/h
 Position : -25.5671616667 28.0575566667
 Location : Gauteng
 Signal Strength : 21

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Compartment 1
<ul style="list-style-type: none"> • Status - Sealed (SN:1631) • Compartment - ULP95 • Overfill Sensor - Dry • API - Wet • API - Closed • Manhole Cover - Closed • Bottom Valve - Closed
Compartment 2
<ul style="list-style-type: none"> • Status - Empty • Compartment - Dry • Overfill Sensor - Dry • API - Dry • API - Closed • Manhole Cover - Closed • Bottom Valve - Open
Compartment 3
<ul style="list-style-type: none"> • Status - Sealed (SN:4744) • Compartment - ULP95 • Overfill Sensor - Dry • API - Wet • API - Closed • Manhole Cover - Closed • Bottom Valve - Closed



EVENT LIST

Date	Event	Status	Latitude	Longitude	Speed	Location	View
2018-07-25 08:47:29 AM	Bottom Valve Sensor	Open	-26.11135333	28.1364300000	0	Metermatic	VIEW
2018-07-25 08:48:07 AM	API Sensor	Open	-26.11135333	28.1364300000	0	Metermatic	VIEW
2018-07-25 08:48:07 AM	Compartment Status	Unsealed	-26.11135333	28.1364300000	0	Metermatic	VIEW
2018-07-25 08:48:09 AM	API Optic	Wet	-26.11135333	28.1364300000	0	Metermatic	VIEW
2018-07-25 08:48:36 AM	Retain Sensor	Wet	-26.11135333	28.1364300000	0	Metermatic	VIEW
2018-07-25 08:48:36 AM	Compartment Status	Loading	-26.11135333	28.1364300000	0	Metermatic	VIEW
2018-07-25 08:51:06 AM	Bottom Valve Sensor	Closed	-26.11135333	28.1364300000	0	Metermatic	VIEW
2018-07-25 08:51:23 AM	API Sensor	Closed	-26.11135333	28.1364300000	0	Metermatic	VIEW
2018-07-25 08:51:23 AM	Compartment Status	Sealed	-26.11135333	28.1364300000	0	Metermatic	VIEW