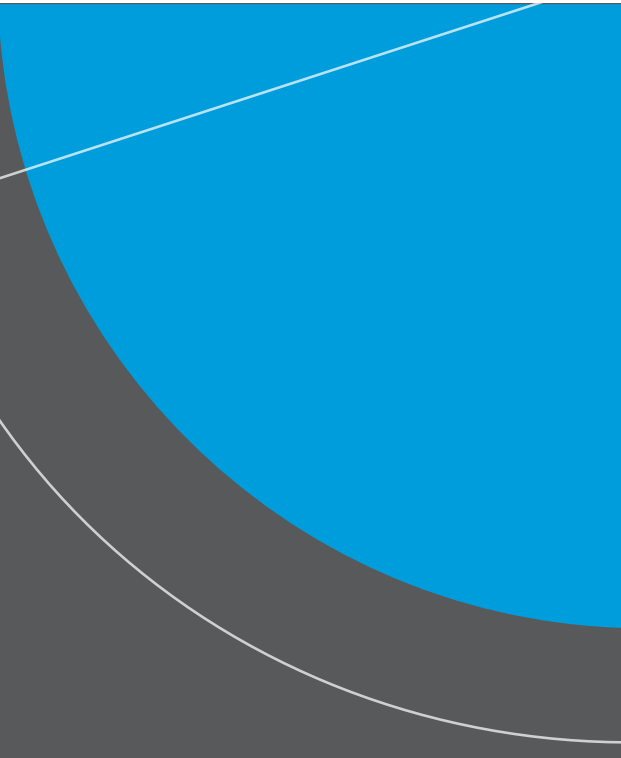# NEX·U· ®

FLUID MANAGEMENT SYSTEM

ORION ®

Alentec & Orion AB   SWEDEN

WE PROVIDE SOLUTIONS

ABOUT US

Alentec & Orion AB has headquarters with development and marketing department as well as a warehouse in Älta, east of Stockholm.

Our main focus is equipment for pumping, measuring and dosing lubricants. We are among the world leaders in this industry.
We have a lot of experience with equipment of this type as the company has been active for more than 100 years and since the 1930s with high-pressure lubrication as a focus.

The environmental aspect is always an important part of both the planning, installation and service process. For us, it is a matter of course to try to reduce our and our customers' environmental impact. For our operations, we have established a process-based quality and environmental management system, according to the requirements of ISO 9001 for quality management systems and ISO 14001 for environmental management systems.

VISION

Alentec & Orion AB shall be one of the leading suppliers of equipment and systems for pumping, measuring and dosing in selected markets within the lubrication equipment segment.

OUR STRATEGY

We market and sell our products for use in: Automotive, Industrial, Marine, Agricultural and Mining.

PREMIUM BRAND

We develop, manufacture and supply high performing lubrication equipment for the automotive and industrial sectors.

THE CUSTOMER IS OUR PARTNER

We always strive for long-term business relationships with our customers with the help of shared knowledge and mutual understanding of each other.

ALENTEC & ORION AB
Älta, Sweden

You need to control your fluids

It is more than likely that your stock control for parts and consumables is well established, with charges for those items passed to customers as a matter of course.
But can you reconcile your oil purchases with oil sales and usage?
Do you know where every litre of oil is used?
Do you know how much just "disappears"?

**Lost inventory equals lost profit.
With today's high oil prices,
Inventory Control
eliminates that concern.**

Why NEX·U·®

NEX·U·® provides you with the control and the information you require to make your operation more profitable. You will be able to account for every drop of lubricant and other service fluid used.

On top of this, you will carry an efficient inventory control, with automatic alerts and fluid reordering when needed, eliminating operations downtime.

For almost any lubricant usage or operation size, with today's high cost for these fluids, **NEX·U·®** quickly pays for itself. Once it is paid for, savings go right to the operation's bottom line in the form of profit, profit previously lost.

NEX·U·® adapts to your way of working.

NEX·U·® is a hybrid system that brings you all the advantages of wireless flexibility and hard-wired reliability:

Wireless flexibility
• Data can be transmitted wirelessly among the different system components, eliminating long and expensive cable runs.
• Easily adds new components when required as your needs grow.
• System uses existing Wi-Fi® networks, simplifying its installation. No need for special, custom made, network components.

Hard-wired reliability
• A constant and reliable power source is always present to power the solenoid valves that control fluid delivery.
• No uncharged batteries to let you down.
• Hard-wired data transmission to avoid interferences and other obstacles which might interfere with wireless data transmission.
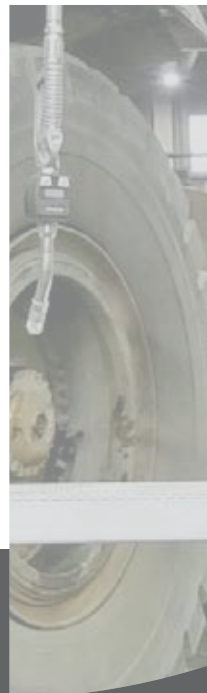
inventory

NEX·U·® combines the Latin word "NEXUS", which means connection to wireless or hard-wired connected system components, with "U" (You), the system User, the Human.

NEX·U·® has been conceived with the user in mind, making fluid management and fluid inventory control an easy and trouble free activity.

NEXUS + YOU = NEX·U·®

NEX·U·® contributes to increase productivity in vehicle service operations:

- Provides total control and record of every fluid dispensed.
- Secures fluid access to authorized technicians only.
- Provides accurate, real time fluid inventory information.
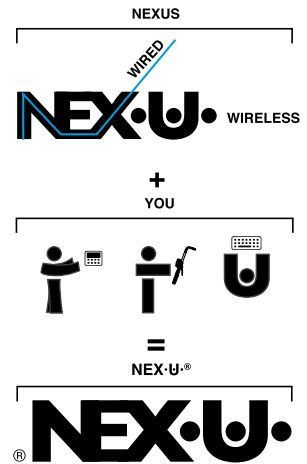
Main components

U·net	U·track	U·dat	U·vision⁺	U·valve	U·tank
NEX·U·® Central Processing Unit. Controls and manages all functions and communications, wired or wireless.	NEX·U·® software. Included together with the U·net. It is the interface between the user and the system. Generates useful reports, keeps control of inventory and can communicate with multiple DMS.	System keypad. With a full colour, touchable screen and a full QWERTY keypad provides full access to NEX·U·® and U·track.	Hand-held display with access keypad.	All-in-one flow control unit. Includes pulse meter, solenoid valve, filter and electronic board for operation control and communication with other system components.	Provides real-time inventory control and manages different alarm signals.

U·net: NEX·U·®
System Central Processing Unit

U·net is the key NEX·U·® component. It is the central processing unit that controls the system communications and houses the U·track software.

U·net includes a powerful 2.4 GHz processor and 4 GB RAM. It controls the system functions and it manages the wired and wireless communication between the NEX·U·® components.

It has two CAN BUS ports (in/out) for wired communications with other NEX·U·® components and an ethernet port that allows U·net to connect to the LAN.
*Alentec & Orion AB may deploy a dedicated network with an additional Wi-Fi® router (U·net is not a router), contact Alentec & Orion AB for further information.

Unet

U·net specifications:

- Intel 2,4 GHz processor
- 4 GB RAM memory
- 64 GB storage capacity
- One Ethernet connection, one HDMI, four USB and two CAN BUS communication ports
- 110-240V AC - 5V DC transformer included.

153 mm · 42 mm · 98 mm · 30 mm · 161 mm

2 x CAN BUS · Power 110-240 V · HDMI · Ethernet · 4 x USB
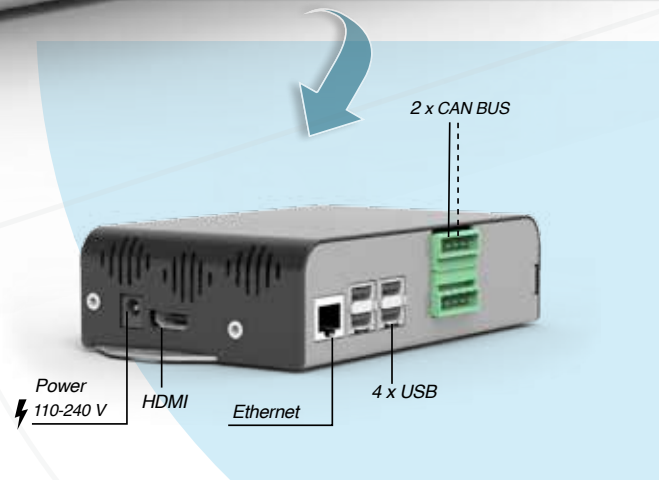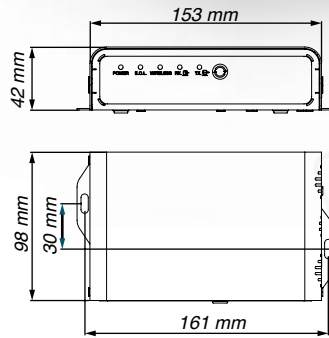
U·net also includes the U·track software.

U·track is a powerful web based software package that gives you full control of fluid usage and inventory. It is a web based software that allows multi-user applications. All PCs or tablets in the same network and in the same location can have access to U·track. U·track can work using any web browser.
Compatible with: Chrome, Firefox, Microsoft Edge.

**Thanks to U·track you will be able to:**

- Simple and intuitive system set-up.
- Simplified system maintenance (manage users, fluid inventory, etc.).
- Manage all the system hard-wired and wireless communication.
- Generate a wide variety of reports, which can be easily exported to CSV and txt formats.
- Record and manage Validated Preset Transactions (required for operating with U·Vision+)
- Transform any PC terminal in the workshop into a NEX·U·® virtual keypad license required.

U·track also contributes to increase your operations efficiency and profitability:

- Keeps control of every fluid drop dispensed in the system.
- Improves inventory accuracy, generating automatic warnings and email notifications for reorders at critical predefined inventory levels.
- Generates a variety of reports, to help you track dispense information such as date and time, technician, work order, fluid dispensed, volume delivered, etc.

U·track: NEX·U·® Software

Utrack
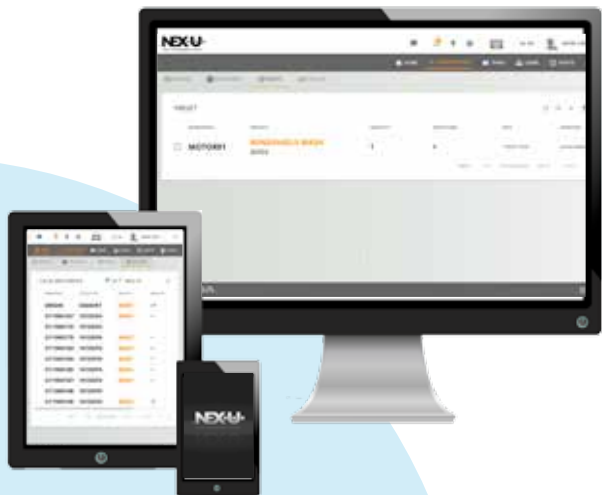
U·track system is a web based application accessible through any device (laptop, Pc, tablet or cell phone) connected to the same network as U·net.
A virtual keypad license converts any device connected to NEX·U·® into a virtual keypad, making it an accesible for dispensing fluids.
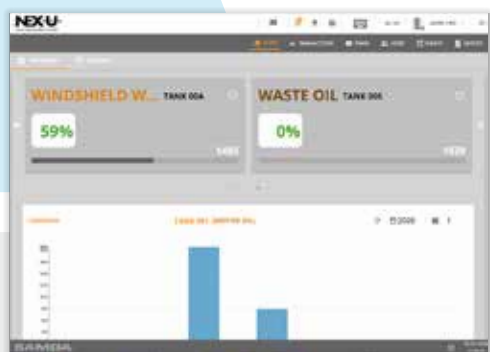
U·track dashboard screen.
In a glance, provides information on oil inventory and oil usage. Just click on any tank for more information.
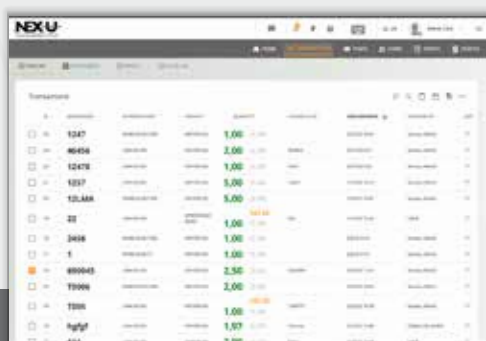
Transactions can be followed and monitored on a real-time basis if required. Thanks to U·track, each PC terminal or tablet connected to the same network used by NEX·U·® is converted into an access keypad to the NEX·U·® system (additional licenses may be required).
U·track can also generate different reports that can be exported easily into CSV format.

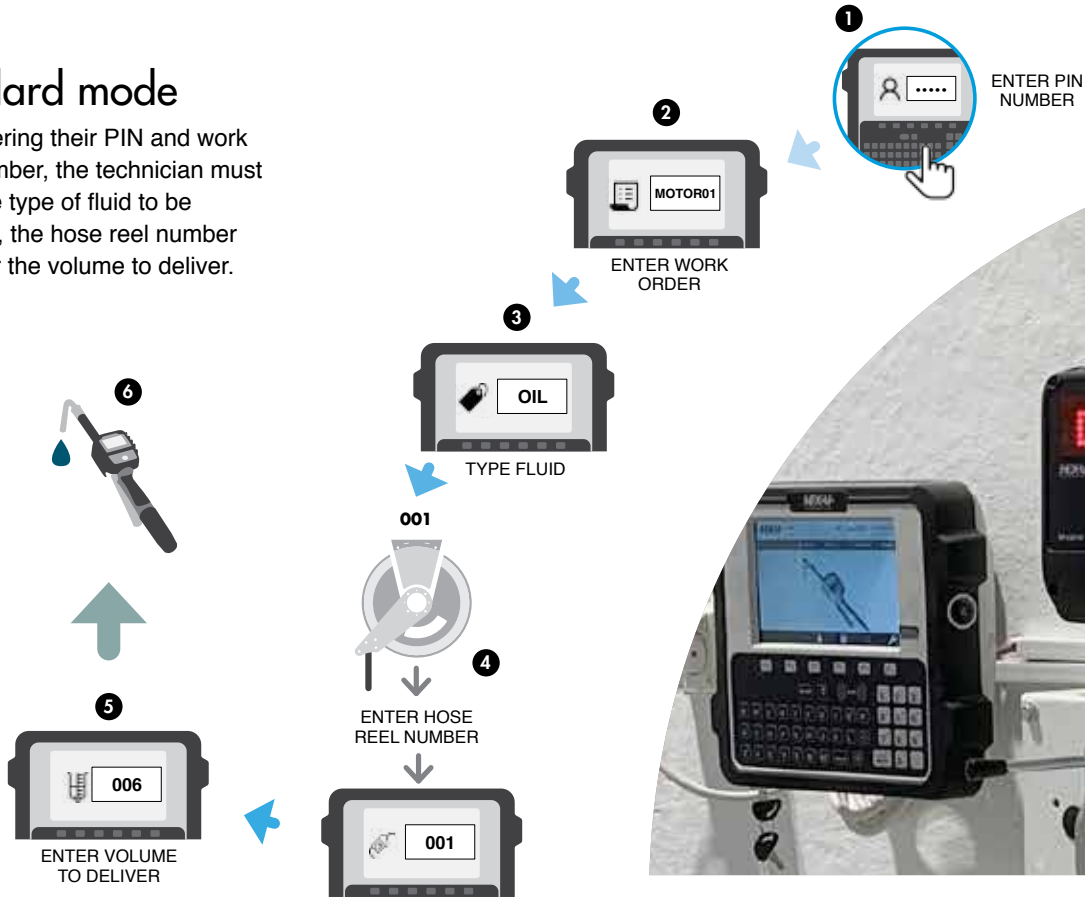## ORDERING INFORMATION

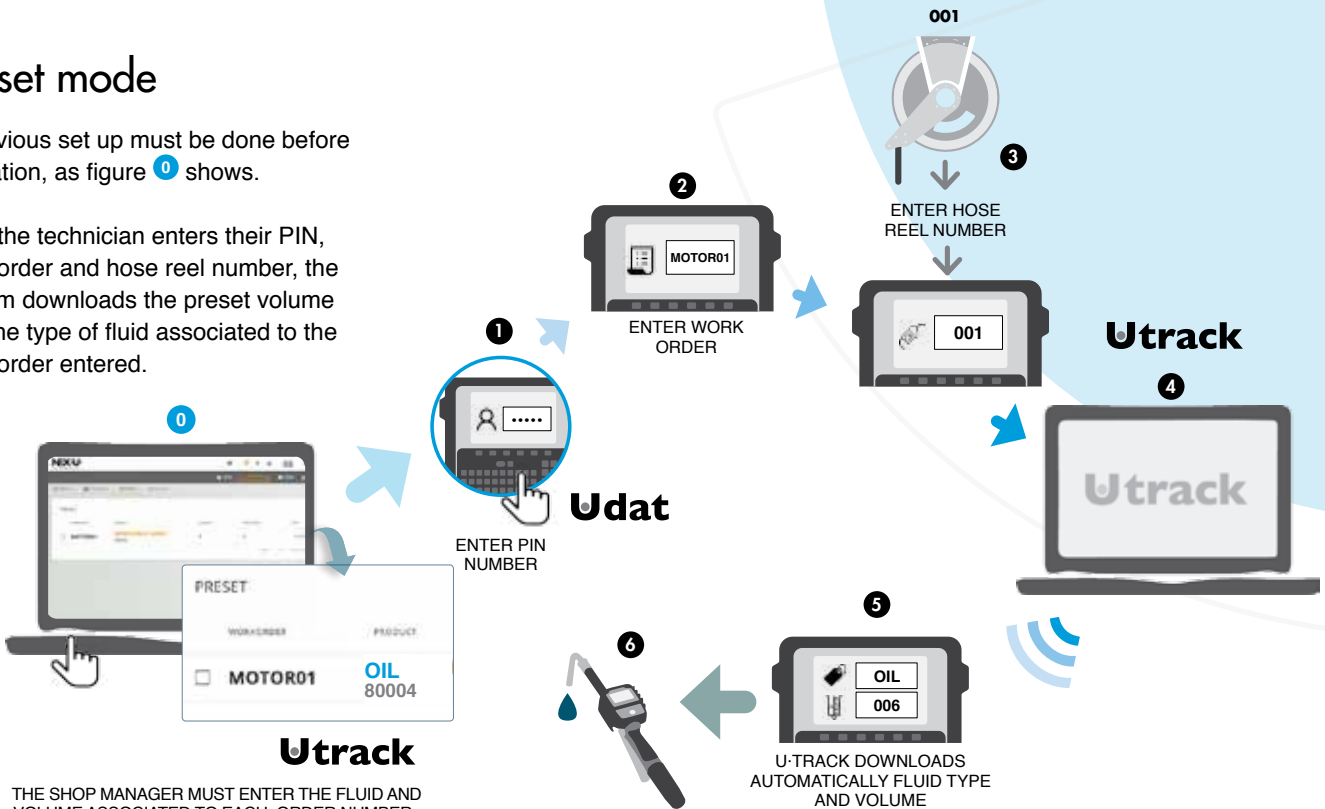| Part No.	Description
23800	U·net central processing unit. Includes U·track software.
23801	Virtual Keypad license. Converts any terminal (PC, laptop, tablet or smartphone) into a NEX·U·® access Keypad.

Dispensing mode options

Standard mode

After entering their PIN and work order number, the technician must select the type of fluid to be delivered, the hose reel number and enter the volume to deliver.

❶ ENTER PIN NUMBER

❷ MOTOR01 — ENTER WORK ORDER

❸ OIL — TYPE FLUID

001 — ❹ ENTER HOSE REEL NUMBER — 001

❺ 006 — ENTER VOLUME TO DELIVER

❻

Preset mode

A previous set up must be done before validation, as figure ⓿ shows.

After the technician enters their PIN, work order and hose reel number, the system downloads the preset volume and the type of fluid associated to the work order entered.

001 — ❸ ENTER HOSE REEL NUMBER — 001

❷ MOTOR01 — ENTER WORK ORDER

❶ ENTER PIN NUMBER — **Udat**

Utrack ❹

⓿

PRESET

WORKORDER	PRODUCT
☐ MOTOR01	**OIL** 80004

Utrack

THE SHOP MANAGER MUST ENTER THE FLUID AND VOLUME ASSOCIATED TO EACH ORDER NUMBER.

❺ OIL / 006 — U·TRACK DOWNLOADS AUTOMATICALLY FLUID TYPE AND VOLUME

❻

DMS - Dealer Management System Interface

NEX·U·® can interface with most popular DMS on the market, offering an efficient bidirectional communication to integrate the transaction information workshop DMS.

Features

- Easy to use: quick and effective.
- Enhanced security: work orders are checked and validated before fluid is dispensed.
- Automation: simplifies data entering as it can be automatically downloaded from the DMS.

Contact your Alentec & Orion AB Distributor who will assist you with the license software you need.
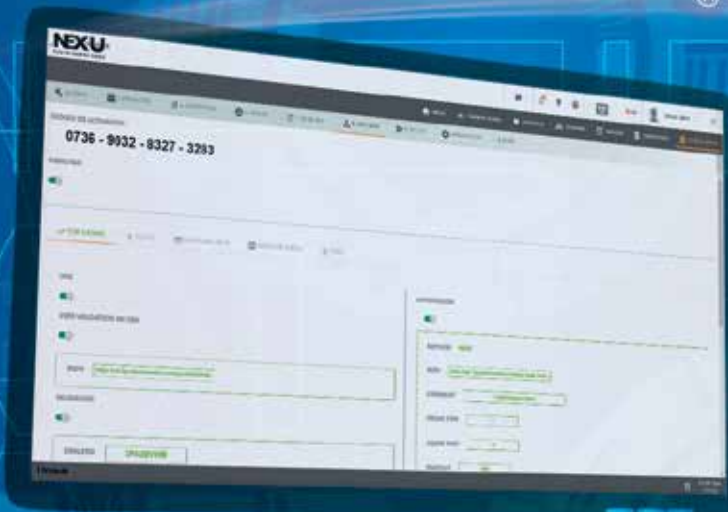
Udat

ENTER PIN
NUMBER

Unet

U·NET SENDS
DATA TO DMS

DMS

CHECKS AND VALIDATES
THE INFORMATION
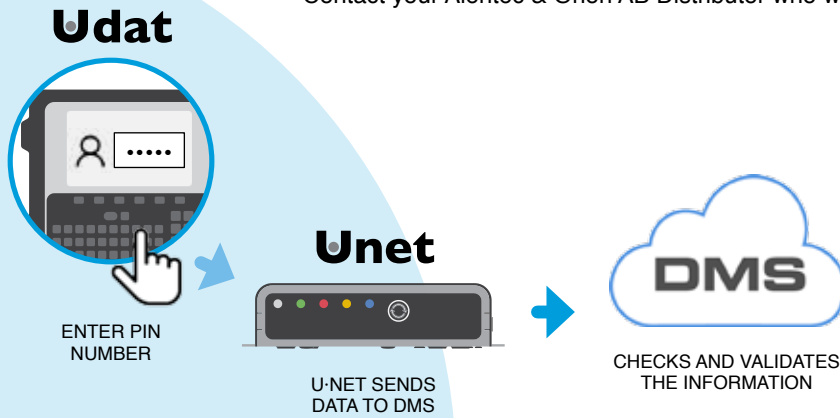
NEX·U·® Interface

A bidirectional communication is established through webservice. The user enters their PIN number and the work order. DMS will prompt a message whether this information exists or not.
NEX·U·® offers multiple operating modes depending on the customer needs.

Bi-directional integration with DMS used by most brands

NEX·U·

0736 - 9932 - 8327 - 3283

System access:
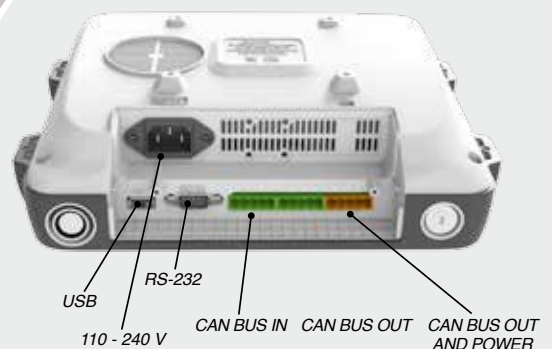## Multiple Possibilities

NEX·U·® adapts to the way you work and it offers multiple possibilities for accessing the system.

Technicians can access NEX·U·® via:
- U·dat: System access keypad.
- U·vision+.
- Any device connected to the same network as U·net (laptop, smartphone or tablet).

Udat
Udat power+

U·dat: Access Keypad

USB
RS-232
110 - 240 V
CAN BUS IN   CAN BUS OUT   CAN BUS OUT AND POWER

U·dat connection panel.

All wired connections can be quickly and easily done without opening the U·dat. It is possible to connect a printer, an external RFID reader or a barcode reader to the RS-232 port.
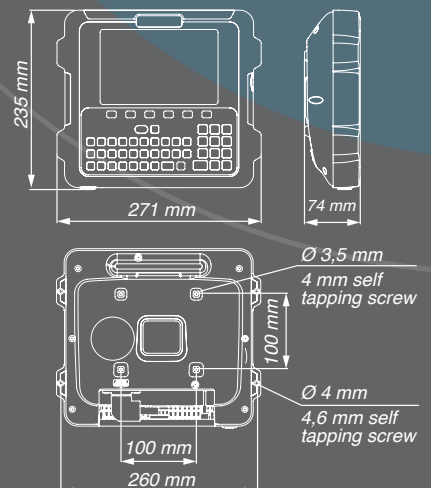
U·dat:
- 110 - 240 V AC
- CAN BUS in/out

System Access Keypad. U·dat allows system access to technicians either through a PIN code or using a RFID card.

- U·dat includes a 7" full colour graphics display and a complete QWERTY keypad.
- U·dat supports CAN BUS cable communications that transmits data and power to open the solenoid valves in the system. "Plug-and-play" connectors make cabling easy.
- U·dat includes the transformer required to simultaneously open up to 8 solenoid valves.
- U·dat requires 110 - 240 V power supply.
- Optional Bluetooth printer (see accessories).

235 mm
271 mm
74 mm
100 mm
260 mm
100 mm
Ø 3,5 mm
4 mm self tapping screw
Ø 4 mm
4,6 mm self tapping screw

ORDERING INFORMATION

Part No.	Description
23821	**U·dat power+ keypad** NEX·U·® access keypad with 7" colour screen and QWERTY keypad. One USB, one RS232 and in/out CAN BUS ports. 110 - 240 V AC, with a 320 W transformer to open 8 solenoid valves, supports CAN BUS communications.
23820	**U·dat keypad** Same as above, but with a 75 W transformer to open 2 solenoid valves.

10

# U·vision⁺: Hand-held display and keypad module

U·vision⁺ includes a six-button keypad and it can replace the U·dat keypad for data entry in the system as it allows the following operations:

- User access through PIN entry.
- Scroll through existing open job orders to select the one corresponding to each operation or enter the job order number (digits only).
- Enter the volume of fluid to be dispensed.
- Confirm fluid type and transaction.

U·vision⁺ has a backlight display connected using Bluetooth® with a U·valve, U·meter⁺ or U·count and it displays the following parameters:

U·vision⁺ is powered with 4 "AA" 1.5 V alkaline batteries.

U vision⁺
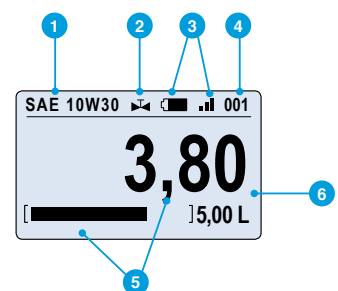
SAE 10W30   001

3,80   5,00 L

1 Fluid dispensed type.
2 Solenoid valve open or closed.
3 Battery life and Bluetooth® signal.
4 Hose reel / fluid outlet number.
5 Volume delivered and operation progress.
6 Preset volume.

Two possible dispensing modes: Standard and Preset

690063

Enter button

Four scroll / navigation buttons

213

Enter technician PIN number

STANDARD MODE

690063

Enter / select job order number

4.5

Enter volume to deliver

PRESET MODE

690063

Select transaction

U·vision⁺ adapts to any ORION oil control handle and transforms the handle into a hand-held display and keypad for access to the NEX·U·® system.

ORDERING INFORMATION

Part No.	Description
23831	U·vision⁺ hand-held keypad and display module (oil gun not included).

Volume Meters

NEX·U·® obtains dispensed volume information from oval gear meters. These meters transmit a pulse per each fraction of volume that goes through them. **NEX·U·®** recognizes and processes these pulses to shut down the corresponding solenoid valve, once the preset volume is reached and to maintain inventory control and pump operation.

Pulse meters are placed in the dispense line, so they are not subject to accidental damage and cannot be by-passed or tampered with. They effectively count every fluid drop.

There are different meter models to meet the needs of each application.

Component	Pulse meter	Solenoid valve	Communication module	Bluetooth®	Wi-Fi®	Materials and Inlet / outlet ports available
U·valve	Yes	Yes	Yes	Yes	-	Aluminium 1/2"
U·valve⁺	Yes	Yes	Yes	Yes	Yes	
U·meter	Yes	-	Yes	-	-	Aluminium 1/2" and 3/4"
U·meter⁺	Yes	-	Yes	Yes	-	
U·pulser	Yes	-	-	-	-	PVC & SS 1/2"
U·count	-	-	Yes	Yes	-	N/A

U valve
U valve⁺

U·valve is a compact unit combining a high accuracy pulse meter, a solenoid valve and a large cleanable fluid screen filter with an electronic module. This module is required to control the meter and valve operation and to communicate with other system components.

- Reduces installation time and eliminates the risk of leaks when using separate components.
- It has a large, high visibility LED display which shows the U·valve number assigned in the system and the U·valve operation.

- Four coloured LED lights that show the U·valve operation for diagnosis and two buttons for system configuration.
- U·valve supports CAN BUS cable communication that transmits data and the electric power required to open the solenoid valve and Bluetooth® connection to a U·vision or a U·vision⁺ fluid handle

with display.
- U·valve⁺ includes Wi-Fi® communications for data transmission to other system components. (Requires U·power or U·power⁺ power supply units).
- U·valve and U·valve⁺ require 24 V DC supplied by a U·dat or a U·power module.

Product specifications	
Wetted parts	Aluminium, NBR, stainless steel, acetal
Applications	Lubricants, antifreeze solutions * if fluid additives are used, it is recommended to install stainless steel pulse meter and stainless steel solenoid valve
Connection threads	1/2" BSP (F)
Flow range	1 - 30 l/min
Pulses per litre	328 ppl
Accuracy	+/- 0,5 %
Maximum working pressure	100 bar
Solenoid valve	24 V DC
Communication	CAN BUS, Bluetooth®, Wi-Fi® (U·valve⁺ only)

U·valve and U·valve⁺ wired connections use fast connection in/out CAN BUS terminals.

U·valve cable connectors are not included (see accessories).

130 mm   173 mm

134 mm

82 mm / 112 mm

Ø 7 mm   M5 screw

60 mm / 117 mm
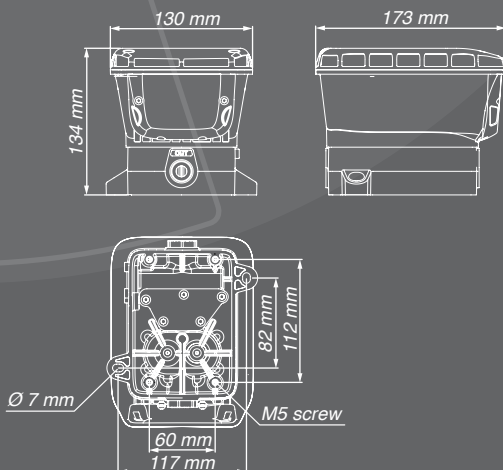
ORDERING INFORMATION

Part No.	Description
23850	U·valve meter, solenoid valve and electronic module. Includes Bluetooth® communication for connecting to a U·vision or U·vision⁺.
23851	U·valve⁺ meter, solenoid valve and electronic module. Includes Bluetooth® connection to a U·vision or U·vision⁺ and Wi-Fi® for data transmission to other components in the system.

U·meter
U·meter⁺

High accuracy, compact pulse meter including the electronic module required to control the meter and valve operation and to communicate with other system components through CAN BUS.

- The meter has an LED display showing the U·meter number assigned in the system, four coloured LED lights that show the U·meter operation for diagnosis and two buttons for system configuration.
- Equipped with fast connection in/out CAN BUS terminals.
- Available in different materials and sizes to match different applications.

**U·meter⁺ includes Bluetooth® connection to a U·vision or a U·vision⁺ module.**

23861

23864

U·meter+ includes Bluetooth® for connecting to a U·vision or U·vision⁺.

U·meter Part No.	23860	23866	23862	23864
Wetted parts	Aluminium, NBR, stainless steel, acetal	Aluminium, NBR, stainless steel, acetal	PVC, Vectra®, stainless steel, Viton®	Stainless steel, Vectra®, Viton®
Applications	Lubricants	Lubricants, diesel	DEF/AdBlue®, windshield wash and antifreeze solutions	DEF/AdBlue®, windshield wash and antifreeze solutions
Connection threads	1/2" BSP (F)	3/4" BSP (F)	1/2" BSP (F)	1/2" BSP (F)
Flow range	1 - 30 l/min	8 - 80 l/min	1 - 50 l/min	1 - 50 l/min
Pulses per litre	328 ppl	109 ppl	320 ppl	320 ppl
Accuracy	+/- 0,5 %	+/- 0,5 %	+/- 0,5%	+/- 0,5%
Maximum working pressure	100 bar	100 bar	30 bar	100 bar
Communications	CAN BUS	CAN BUS	CAN BUS	CAN BUS
U·meter⁺, models with Bluetooth® Part No.	23861	23867	23863	23865

Only for connection with U·dat, U·valve, or an adjacent U·meter. Requires a 24 V DC solenoid valve.
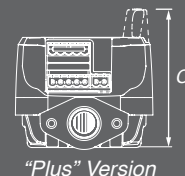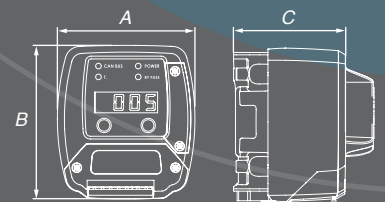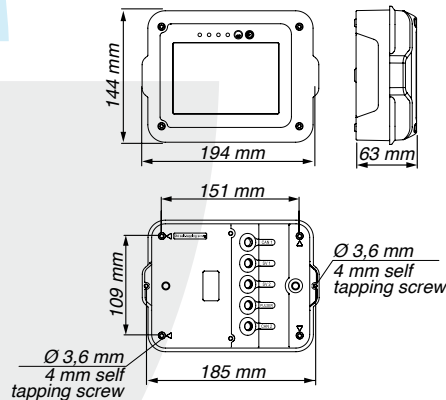
	23860	23861	23866	23867	23862	23863	23864	23865
A (mm)	86	86	86	86	86	86	86	86
B (mm)	96	96	96	96	96	96	96	96
C (mm)	70	86	101	117	73	86	70	86

"Plus" Version

Product specifications are subject to change without prior notice.

Ucount

Upulser

U·count Fluid control module includes a high visibility LED display and the software required to function with the rest of the NEX·U·® system components.

The LED display shows the number assigned in the system and four colour LED lights show the operation of the valve for diagnosis and two buttons for system configuration. U·count supports CAN BUS hard-wired communication that transmits data and power required to open the solenoid valve, for data communication with other system components and Bluetooth® to communicate with a U·Vision or U·Vision+ handle.

U·count dimensions:

144 mm
194 mm
63 mm
151 mm
109 mm
185 mm
Ø 3,6 mm
4 mm self tapping screw
Ø 3,6 mm
4 mm self tapping screw

U·pulser high accuracy in-line pulse meter. Equipped with connection terminal and valve open indication light. Only for connection to a U·count module. This meter does not have a display or function buttons and requires a 24 V DC solenoid valve.

ORDERING INFORMATION

U·count	23836				
Description	Fluid meter and solenoid valve controller includes Bluetooth®, CAN BUS communications.				
U·pulser meter	**25060**	**25065**	**25062**	**25061**	**23868**
Wetted parts	Aluminium, NBR, stainless steel, acetal	Aluminium, NBR, stainless steel, acetal	PVC, Vectra®, stainless steel, Viton®	Stainless steel, Vectra®, Viton®	Aluminium, acetal, NBR, Stainless steel
Applications	Lubricants, antifreeze solutions	Oil, glycol, coolant solutions, diesel	DEF / AdBlue®, windshield wash and antifreeze solutions	DEF / AdBlue®, windshield wash and antifreeze solutions	Oil, glycol, antifreeze solutions, diesel
Connection threads	1/2" BSP (FF)	3/4" BSP (FF)	1/2" BSP (FF)	1/2" BSP (FF)	1" BSP (FF)
Flow range	1 - 30 l/min	8 - 80 l/min	1 - 50 l/min	1 - 50 l/min	10 - 80 l/min
Pulses per litre	328	110	320	320	110
Accuracy	+/- 0,5 %	+/- 0,5 %	+/- 0,5 %	+/- 0,5 %	+/- 0,1 %
Maximum working pressure	100 bar	100 bar	30 bar	100 bar	100 bar

NEX·U·® Compact

NEX·U·® also offers solutions to smaller workshops where web based software is not needed. NEX·U·® COMPACT is a simple system based in a special U·dat keypad that is able to control a maximum of 8 dispensing points.

The Keypad includes a 7" colour screen and a simplified version of the U·track software. The software included provides workshops with:

• Full control of bulk stored fluid usage.
• Inventory control using declining balance method. NEX·U·® COMPACT will give a warning signal once a certain inventory is reached, and restricts access to those outlets that have run out of inventory.
• Ability to generate full reports in CSV format that can provide useful management information.
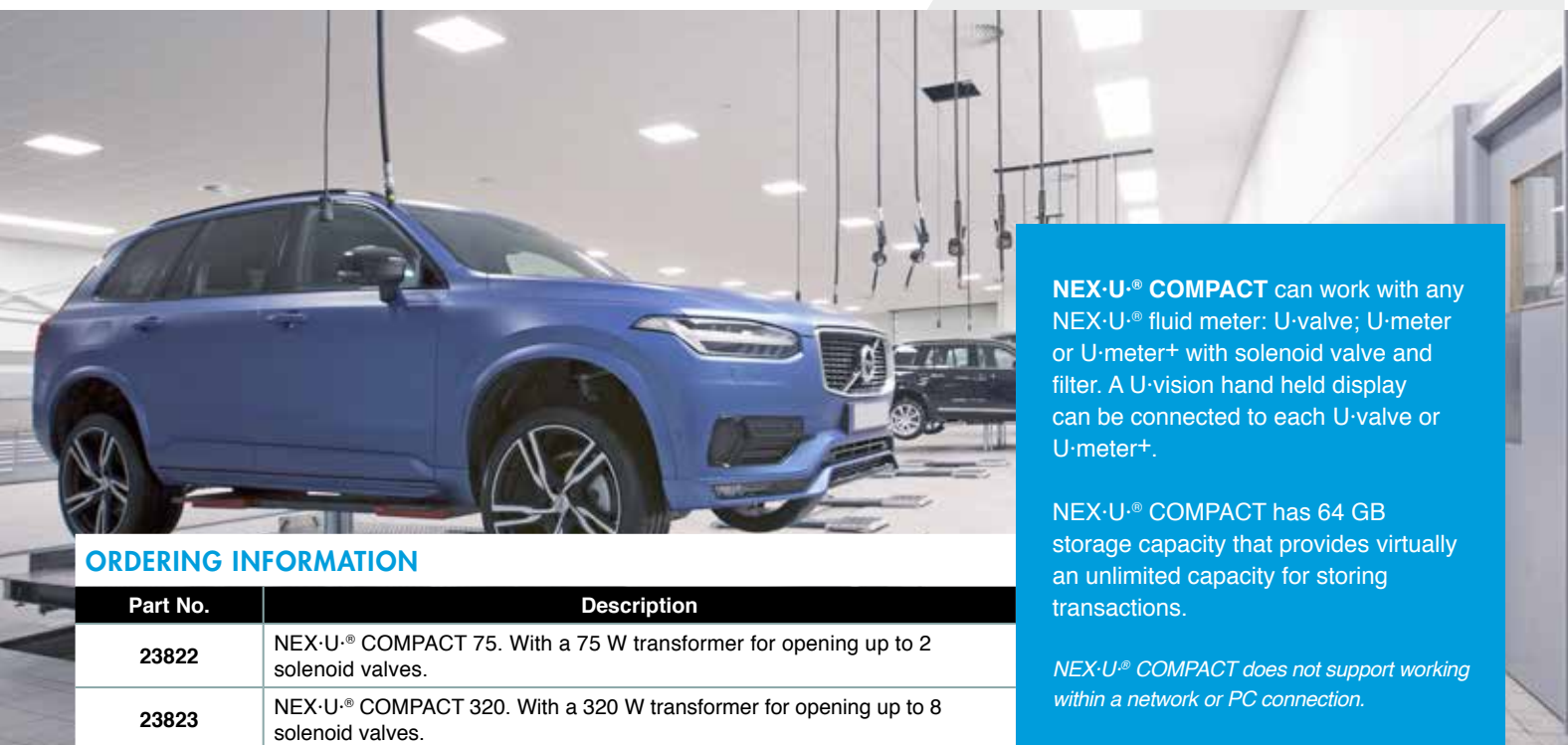
NEX·U·® COMPACT can work with any NEX·U·® fluid meter: U·valve; U·meter or U·meter⁺ with solenoid valve and filter. A U·vision hand held display can be connected to each U·valve or U·meter⁺.

NEX·U·® COMPACT has 64 GB storage capacity that provides virtually an unlimited capacity for storing transactions.

NEX·U·® COMPACT does not support working within a network or PC connection.

ORDERING INFORMATION

Part No.	Description
23822	NEX·U·® COMPACT 75. With a 75 W transformer for opening up to 2 solenoid valves.
23823	NEX·U·® COMPACT 320. With a 320 W transformer for opening up to 8 solenoid valves.
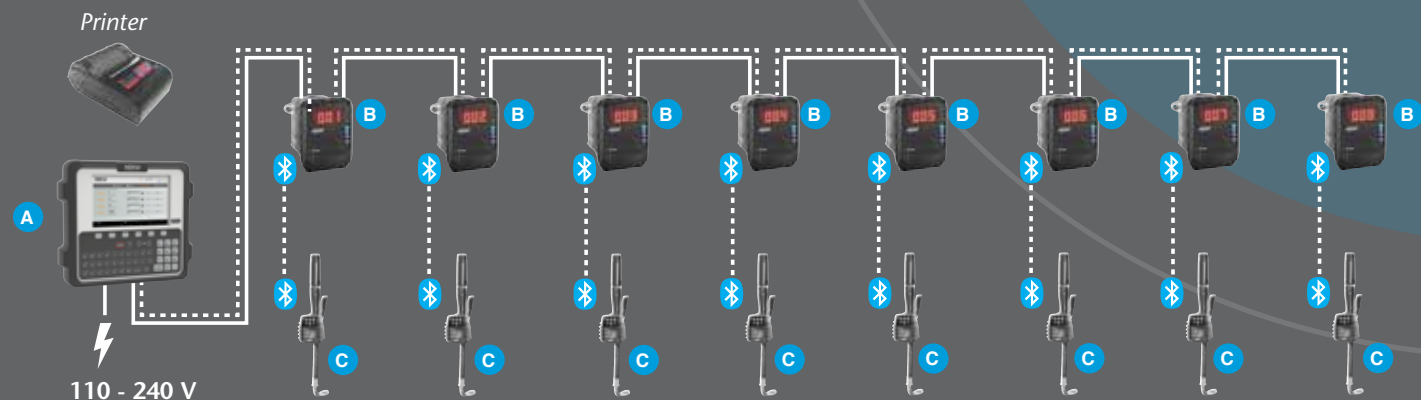
NEX·U·® COMPACT keypad **A** *can control 8 dispensing points (model with 320 W transformer) or 2 dispense point (model with 75 W transformer).*
Each dispensing point **B** *can include a U·valve, a U·meter or U·meter⁺ with solenoid valve combination.*
A U·vision hand held display **C** *can be connected to each fluid outlet using Bluetooth® communications.*
It is possible to include a Bluetooth printer to provide a ticket for the transactions.

Configuration has to be done through a pc.

NEX·U·® Mobile

Fluids in service trucks require similar controls to those in any service centre.

NEX·U·® MOBILE allows fluid inventory and usage control in mobile service trucks.

A special U·dat keypad module, which includes the software required for an autonomous operation, can control up to a maximum of 8 fluid outlets. Completed transactions can be saved to a USB memory stick in an Excel format.
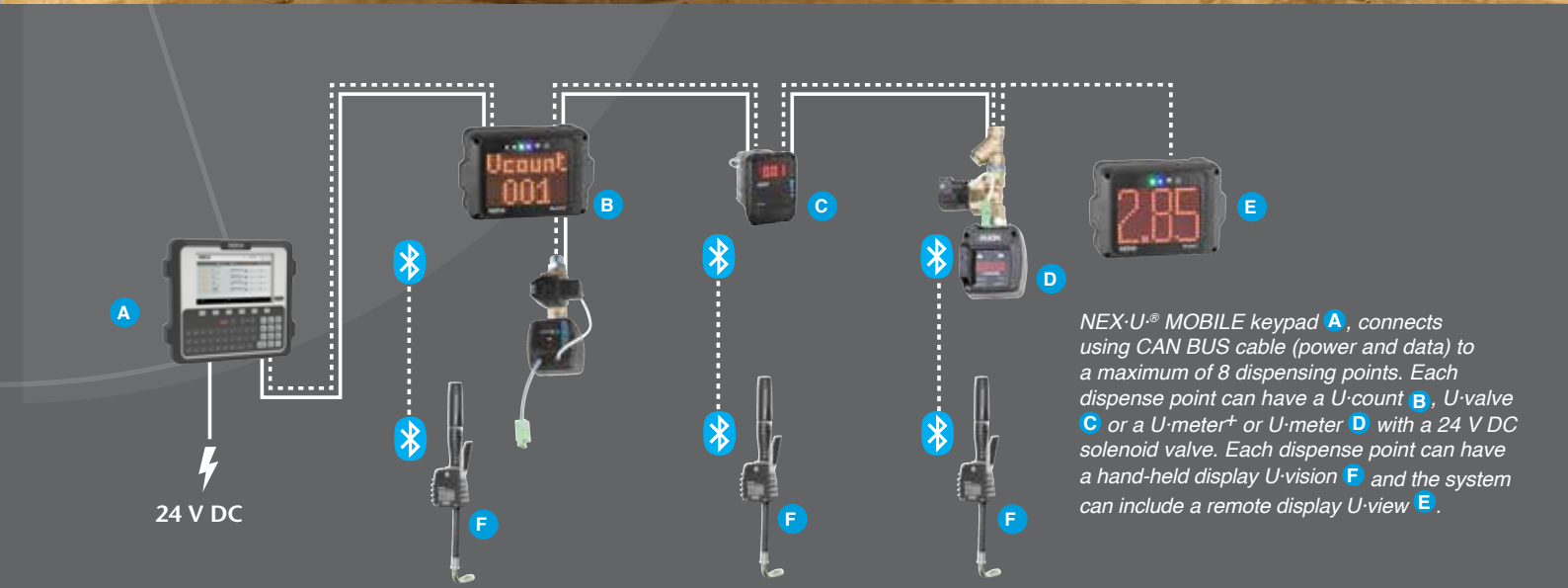

NEX·U·® MOBILE can work with any NEX·U·® fluid meter: U·valve; U·meter or U·meter+ with 24V DC solenoid valve and filter.

Standard U·count and U·pulser solenoid valve are compatible with NEX·U·® MOBILE as long as they are connected to a 24 V DC solenoid valve.

ORDERING INFORMATION

Part No.	Description
23824	NEX·U·® MOBILE keypad.

NEX·U·® MOBILE keypad **A** *, connects using CAN BUS cable (power and data) to a maximum of 8 dispensing points. Each dispense point can have a U·count* **B** *, U·valve* **C** *or a U·meter+ or U·meter* **D** *with a 24 V DC solenoid valve. Each dispense point can have a hand-held display U·vision* **F** *and the system can include a remote display U·view* **E** *.*

24 V DC

NEX·U·® Remote Displays

Uvision
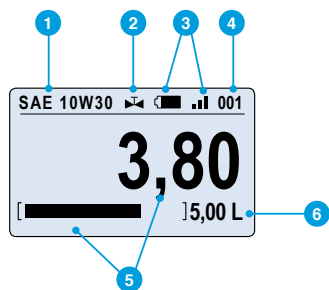
1 Fluid dispensed type.
2 Solenoid valve open or closed.
3 Battery life and Bluetooth® signal.
4 Hose reel / fluid outlet number.
5 Volume delivered and operation progress.
6 Preset Volume.

Hand-held display module to fit a ORION oil control handle. Includes a backlight display connected via Bluetooth® with a U·valve, U·meter+ or U·count module and it displays the following parameters:

• Hose reel (fluid outlet number and fluid dispensed type).
• Battery life and Bluetooth® signal strength.
• Volume delivered and operation progress.
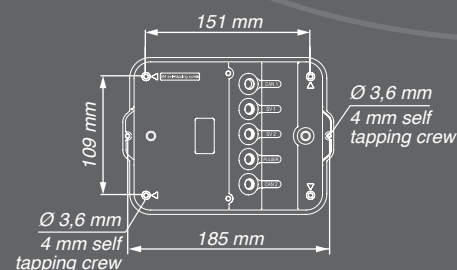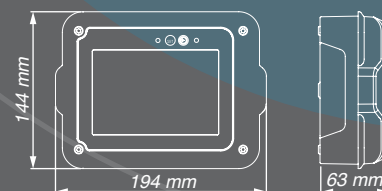• Solenoid valve open or closed.

ORDERING INFORMATION

Part No.	Description
23830	U·vision hand-held display module (oil gun not included).

Uview

Remote, high visibility, LED display that shows the volume delivered through various U·valves (no simultaneous operation supported). U·view supports Wi-Fi® and hard-wired communication.
U·view requires hard-wired connection (data and power) to a U·dat keypad or to a 110 - 240 V AC power supply using a 24 V DC external transformer (U·power or U·power+).

144 mm
194 mm
63 mm

151 mm
109 mm
185 mm
Ø 3,6 mm
4 mm self tapping crew
Ø 3,6 mm
4 mm self tapping crew

ORDERING INFORMATION

Part No.	Description
23835	U·view remote display module.

Product specifications are subject to change without prior notice.

Tank Level Monitor Module

Provides real-time inventory control, reducing concerns about running out of inventory or used fluid tanks overflow.

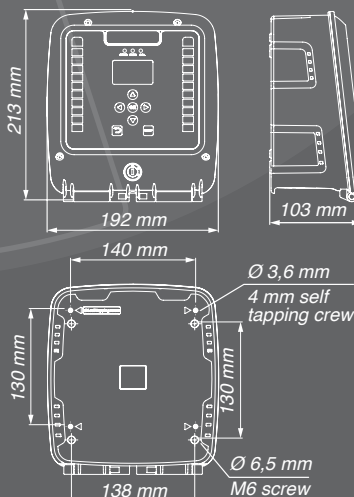**Utank**

The number of input and output ports are:

· One analogical input per tank for a pressure probe with 4-20 mA or 0-10V.
· Three digital inputs per tank for a low, intermediate or high-level probe [1].
· One output per tank for a solenoid valve to control air supply to each pump.

· One output per tank for an electro-pneumatic valve to prevent tank overfill.
· One output for controlling an air solenoid valve to stop the air supply to all pumps when the workshop is closed.
· One output per tank for controlling a flash warning light or an acoustic alarm.

U·tank supports CAN BUS wired communication with other NEX·U·® system components. It requires a 110 -240 V AC supply.

[1] *The use of digital probes does not allow real-time inventory monitoring. NEX·U·® will use declining balance for inventory control and will require manual inventory adjustment when fluid is supplied to the tank.*

It is a monitor module capable of controlling two tanks using digital or analogical level gauges. Can be connected to solenoid valves to control pump operation, and to external warning devices.

U·tank has two independent graphic displays and level bars. Each of them shows the inventory available in each tank. It also has a set-up keypad for inventory adjustment if required.[1]

ORDERING INFORMATION

Part No.	Description
23829	U·tank tank monitoring module. Can control up to two tanks. Supports CAN BUS communications. 110 - 240 V

NEX·U·® Accessories

U·meter and solenoid valve kits

Umeter

U·meter and solenoid valve kits include a high precision U·meter or U·meter+ meter, a solenoid valve and a Y-strainer.

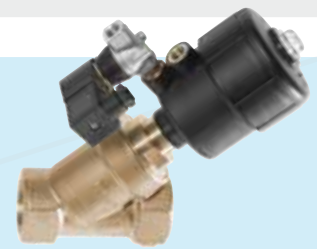| Part No	Application	Pulse meter	Solenoid valve	Y-strainer
23870	Lubricants, glycol	U·meter 23860	28127	28022
23871	Lubricant, glycol	U·meter+ 23861		
23872	Lubricant, glycol with high fluids	U·meter 23866	28304	28059
23873	Lubricant, glycol with high fluids	U·meter+ 23867		
23874	Diesel fuel	U·meter 23866	28308	
23875	AdBlue®, windshield wash (low pressure)	U·meter 23862	28327	28022
23876	AdBlue®, windshield wash (low pressure)	U·meter+ 23863		
23877	Windshield wash	U·meter+ 23864	28127	
23878	Windshield wash	U·meter+ 23865		

SOLENOID VALVES

NEX·U·® requires 24 V DC, normally closed solenoid valves to operate. U·valve and U·valve+ include a solenoid valve. For other metering elements, a solenoid valve compatible with the fluid and the application requirements must be used.

28127

28304

38041

Part No.	Application and wetted materials	Connection threads	Voltage	Type	Max. Working pressure
SOLENOID VALVES FOR FLUIDS					
28127 [1]	Oil and antifreeze solutions. Brass and NBR	1/2" BSP (F)	24 V DC	N.C.	50 bar
28304	Coolant, diesel, water, oil. Brass and NBR	3/4" BSP (F)	24 V DC	N.C.	50 bar
28327	DEF / AdBlue®; antifreeze and windshield wash solutions, stainless steel and EPDM	1/2" BSP (F)	24 V DC	N.C.	10 bar
38041	Electro-pneumatic valve. Prevents over fill of waste fluid tanks. Brass and NBR	1-1/2" BSP (FF) for fluids 1/4" BSP (FF) for air	24 V DC and 1-4 bar compressed air	N.O.	10 bar
SOLENOID VALVES FOR COMPRESSED AIR – PUMP CONTROL					
48081	Compressed air. Brass and NBR	1/2" (F)	24 V DC	N.C.	10 bar
48059	Compressed air. Brass and NBR	1/4" (F)	24 V DC	N.C.	10 bar
48080	Compressed air. Brass and NBR. ATEX approved.	1/4" (F)	24 V AC/DC	N.C.	10 bar

N.C.= Normally closed.
N.O.= Normally open.
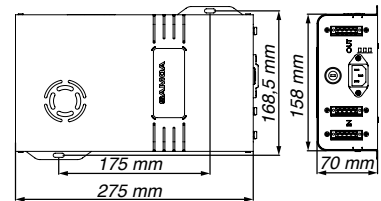*(1) for use in standard delivery applications, with a 1/2" U·meter.*

Upower⁺
Upower

23828

23826, 23827

Uconnect

23881

175 mm
275 mm
168,5 mm
158 mm
70 mm

Power supply to solenoid valves and other system components. U·power connects using CAN BUS cable to a U·valve, U·valve⁺, U·meter, U·meter⁺, U·count or U·view whenever the power supplied by a U·dat keypad is not present.

Part No.	Description
23827	U·power⁺. Power supply unit with a 320 W transformer for use with 8 solenoid valves with 2 CAN BUS connectors.
23826	U·power. Power supply unit with a 75 W transformer for use with 2 solenoid valves.
23828	U·power⁺. Power supply unit with a 320 W transformer for use with 8 solenoid valves with 3 CAN BUS connectors (1 IN and 2 OUT).

CAN BUS TO WIFI CONVERTER

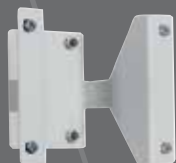| Part No.	Description
23881	U·connect allows wireless communication among the different components of the system. Equipped with an external antenna, it allows for extended signal coverage. It can be configured from a Windows or Android application.

BLUETOOTH PRINTER

On request

Part No.	Description
On request	Optional printer for use with NEX·U·® COMPACT, connected via Bluetooth to the U·dat.

BAR CODE READER

23407

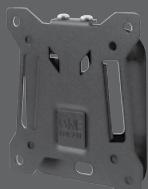| Part No.	Description
23407	Bar code laser reader. Reads any one dimensional code. For use with a U·dat, U·dat Power⁺ and U·dat for NEX·U·® MOBILE and COMPACT systems.

U·valve BRACKETS

Part No.	Description
23882	Allow fixing U·valve on top of a hose reel stand (360 160).

23882

KEYPAD BRACKETS

Part No.	Description
On request	Universal VESA bracket.

On request

NEX·U·®
Accessories

CABLE

3082A 15/18AWG communication and power CAN BUS cable.

Part No.	Description
23890	CAN BUS communication cable.

23890

Part No.	Description
23892	Jumper cable. 0,5 m cable with prewired connectors 381 908 for connecting adjacent elements with a CAN BUS cable.

23892

Part No.	Description
23891	In/out electrical connectors. For use with U·meter, U·meter+.

23891

U·valve CONNECTORS:

Part No.	Description
23886	Allows wiring connection between U·valves.

23886

TANK MONITORING ACCESSORIES

Part No.	Description
23417	Tank level pressure gauge. Allows real-time monitoring of the volume in a tank. Maximum tank depth 350 cm.

23417

Part No.	Description
2330287	Digital level gauge. Detects minimum, intermediate or maximum volume in a tank. Does not allow real-time monitoring. Adjustable height, includes 5 m cable.

2330287

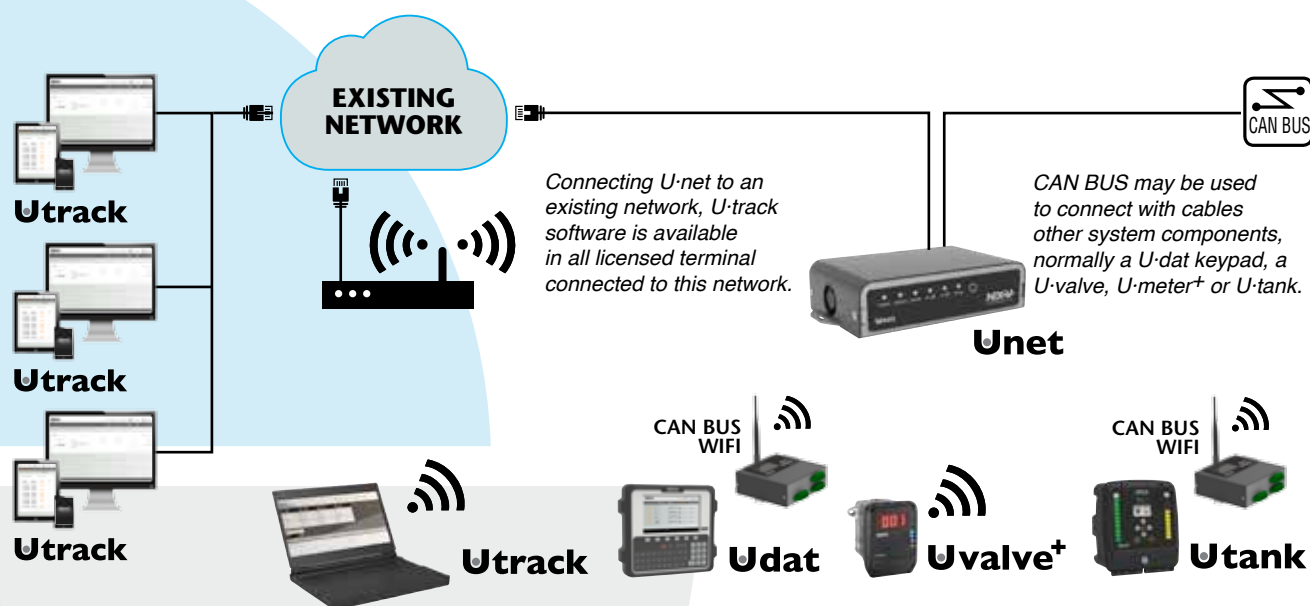| Part No.	Description
23883	Remote flash and acoustic alarm.

Product specifications are subject to change without prior notice

23883

Creating a
Wireless Network

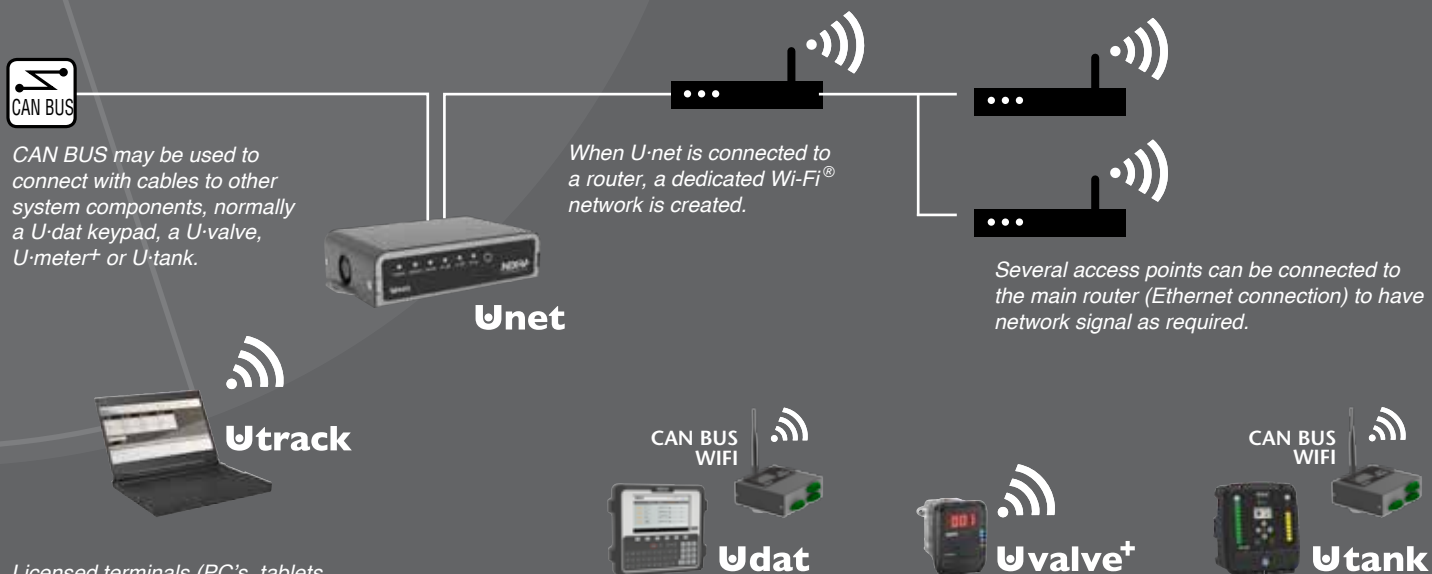There are two ways to create a wireless network:

• Using an existing Wi-Fi ® network. Requires access to existing wireless network credentials.
• Creating a dedicated Wi-Fi® network. New wireless credentials are created for this network.
In both cases IP addresses, network and default gateway, are required. The key component is U·net.

USING AN EXISTING NETWORK

EXISTING NETWORK

Utrack

Utrack

Utrack

Connecting U·net to an existing network, U·track software is available in all licensed terminal connected to this network.

Unet

CAN BUS

CAN BUS may be used to connect with cables other system components, normally a U·dat keypad, a U·valve, U·meter+ or U·tank.

CAN BUS WIFI

CAN BUS WIFI

Utrack   **Udat**   **Uvalve+**   **Utank**

If the network uses Wi-Fi®, NEX·U·® components with Wi-Fi® can connect to the network via Wi-Fi®. Additionally, other licensed terminals (laptops, tablets, Smartphones) can have access to U·track.

CREATING A NEW NETWORK

CAN BUS

CAN BUS may be used to connect with cables to other system components, normally a U·dat keypad, a U·valve, U·meter+ or U·tank.

When U·net is connected to a router, a dedicated Wi-Fi® network is created.

Unet

Several access points can be connected to the main router (Ethernet connection) to have network signal as required.

Utrack

CAN BUS WIFI

CAN BUS WIFI

Udat   **Uvalve+**   **Utank**

Licensed terminals (PC's, tablets, Smartphones) can connect to the NEX·U·® network and have access to the NEX·U·® system through U·track.

NEX·U·® components can connect to the NEX·U·® wireless network for data communication among them.

INSTALLATION EXAMPLES

NEX·U·® provides maximum flexibility in the way the user interacts with the system, the most effective connection method and enhanced reporting capability.
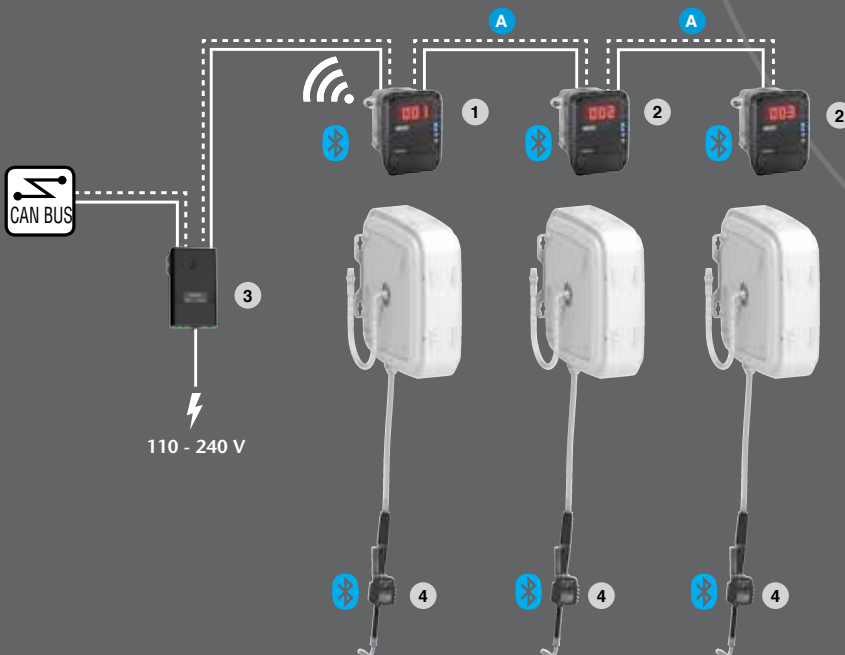
ACCESS THROUGH U·dat

CAN BUS WIFI

110 - 240 V
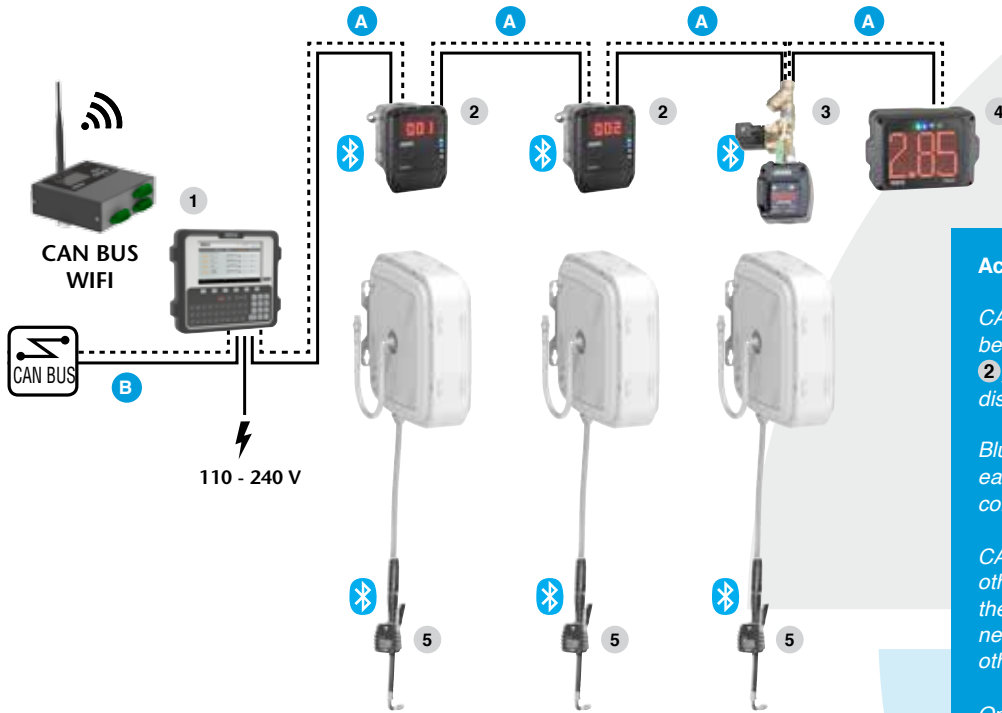
Access through U·dat

CAN BUS cable **A** *, transmits power and data between the U·dat keypad* **1** *, the U·valves* **2** *, the U·meter⁺* **3** *and the U·view remote display* **4** *.*

Bluetooth® connection is used to communicate each U·valve **2** *and U·meter⁺* **3** *with its corresponding U·vision* **5** *hand-held display.*

CAN BUS cable **B** *communicates with other NEX·U·® components. Alternatively, if the keypad* **1** *, is connected to the wireless network, data can be transmitted wirelessly to other NEX·U·® components.*

One U·net must be included in every NEX·U·® installation (except NEX·U· Compact and NEX·U·® Mobile).

ACCESS THROUGH U·vision+


110 - 240 V

Access through U·vision⁺

Power and data are transmited using CAN BUS cable **A** *between the U·valve⁺* **1** *and the other U·valves* **2** *. Power to energize the solenoid valves is supplied by the U·power* **3** *, connected to U·valve⁺* **1** *.*

Each U·valve⁺ **1** *and U·valve* **2** *is connected to its corresponding U·vision⁺* **4** *, hand-held display and systems access Keypad.*

Wireless data transmission is done by U·valve⁺ **1** *.*

One U·net must be included in every NEX·U·® installation (except NEX·U· Compact and NEX·U·® Mobile).

PC - LAPTOP CONNECTION

CAN BUS

110 - 240 V

Utrack
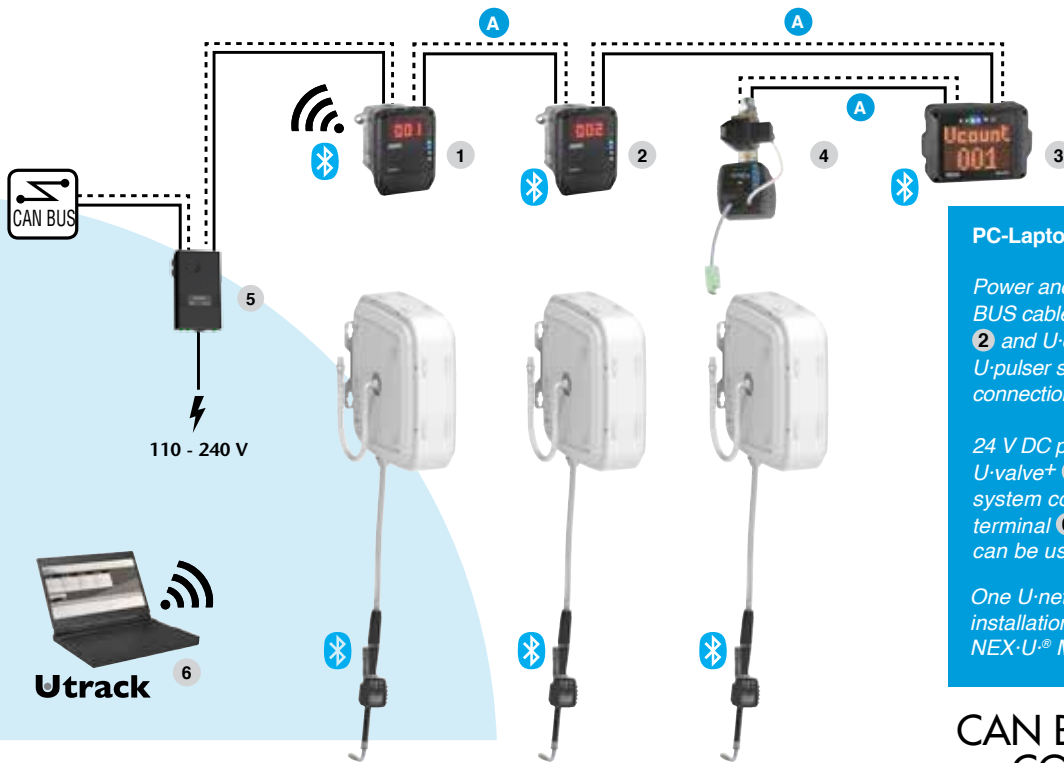
PC-Laptop connection

Power and data are transmitted using CAN BUS cable **A** between the U·valve⁺ **1**, U·valve **2** and U·count **3**. U·count **3** is connected to U·pulser solenoid valve **4** also using CAN BUS connection.

24 V DC power is supplied by U·power **5** to U·valve⁺ **1** connecting using Wi-Fi® with all system components, including any licensed terminal **6** that is connected to U·track and can be used as a virtual access keypad.

One U·net must be included in every NEX·U·® installation (except NEX·U· Compact and NEX·U·® Mobile).

CAN BUS FAST CONNECTION

U·dat, U·valve, U·meter, U·count, U·tank and U·net use in/out CAN BUS fast connectors that make cabling easier, quicker and prevent disconnections.

TANK MONITORING

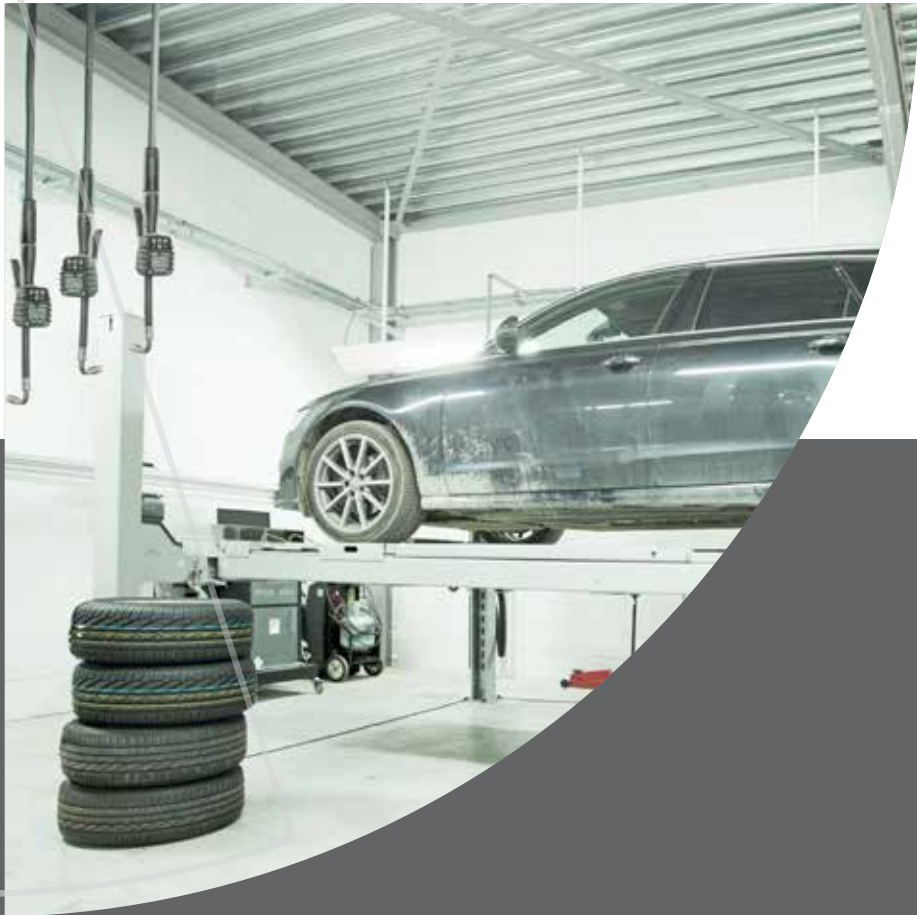**CAN BUS**

110 - 240 V

CAN BUS WIFI
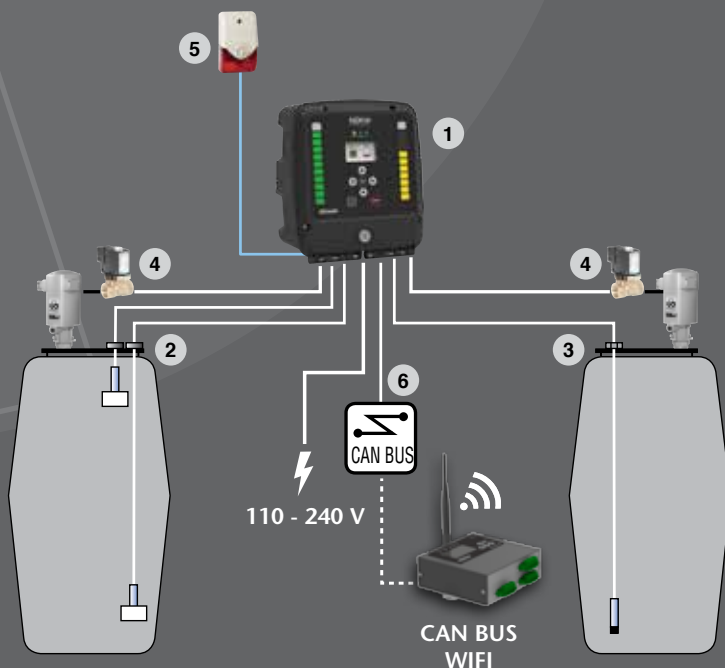
U·tank **1** can monitor up to two tanks. Each tank can be fitted with low and high level sensors **2** or with a pressure gauge **3** for real-time control of the inventory in the tank. U·tank **1** can also control pump operation opening or closing an air solenoid valve **4** that prevents pump from running dry or air entering the oil distribution lines if there is no oil in the tanks.

U·tank **1** can also control a remote flash light or siren **5** to warn when any tank is empty. U·tank **1** can communicate with other NEX·U·® elements using Wi-Fi® or through CAN BUS **6** wired connection.

One U·net must be included in every NEX·U·® installation (except NEX·U· Compact and NEX·U·® Mobile).