

Desoutter



Industrial ^{TOOLS}



AXON
— Desoutter

AXON Controller

“When corded solution
becomes **flexible & scalable**”

More Than Productivity



MULTI-ASSET SOLUTION

- AXON can manage a wide range of corded tools to exceed your requirements.
- Thanks to the various type of tools, it can support a wide torque range, from 0.6Nm to 2000Nm.
- 1 platform to run all types of corded tools

AGILE FEATURE MANAGEMENT

- With feature rebalancing mode, you can rebalance a digital feature from one station to face easily line evolution

TOP OF THE CLASS MAINTENANCE

- Separate Drive and Module improved rebalancing and line optimization. One Drive for multiple applications, use cases and tools.





FOOTPRINT OPTIMIZATION

- Compact terminal with optimized footprint.



EASY LINE REBALANCING

- Backup stored in the Drive and in the module. Easy to rebalance by switching the module or the drive.



WEB USER INTERFACE

- Unique approach for live monitoring with embedded web user interface.
- Get access to results & data with multiple concurrent access.



BOOST YOUR FLEXIBILITY

- ▶ GET WHAT YOU REALLY NEED WITH FEATURE MANAGEMENT
- ▶ COMPATIBLE WITH LATEST CORDED TOOLS FROM DESOUTTER
- ▶ HIGH COMPACTY FOR EASY INTEGRATION

BOOST YOUR UPTIME


- ▶ EASILY REBALANCE YOUR PRODUCTION LINE WITH THE REMOVABLE MODULE
- ▶ ONE UNIQUE PLATFORM TO OPTIMIZE YOUR MAINTENANCE MANAGEMENT
- ▶ WEB USER INTERFACE EMBEDDED TO HAVE AN EASY ACCESS TO DATA ANYWHERE AT ANYTIME


BOOST YOUR PRODUCTIVITY

- ▶ ONE PLATFORM FOR ALL CORDED TOOLS
- ▶ ADVANCED TIGHTENING STRATEGIES TO MANAGE ALL TYPE OF APPLICATIONS
- ▶ FULL ERROR PROOFING CAPABILITIES

ONE PLATFORM FOR ALL CORDED TOOLS



Handheld tools				Fixtured tools			
Pistol Range	Straight & Angle Head Range			Fixtured Range			
							
1-110Nm	3-660Nm	3-270Nm	0.6-27Nm	1.5-2000Nm	12-580Nm	4-480Nm	0.6-12Nm
EPD	EAD	EID	ERS*	EFD	EFDA	EFDO	ERSF*

ERS Module	ERP-HT is not supported
* 	

In an ever-evolving and increasingly demanding environment, today's challenges will not be the same as tomorrow's.

Desoutter provides solutions to your current needs and future solutions for your next challenges.

In its continuous pursuit of innovation, Desoutter has created the most advanced and cutting-edge controller for corded tool solutions: the AXON controller.

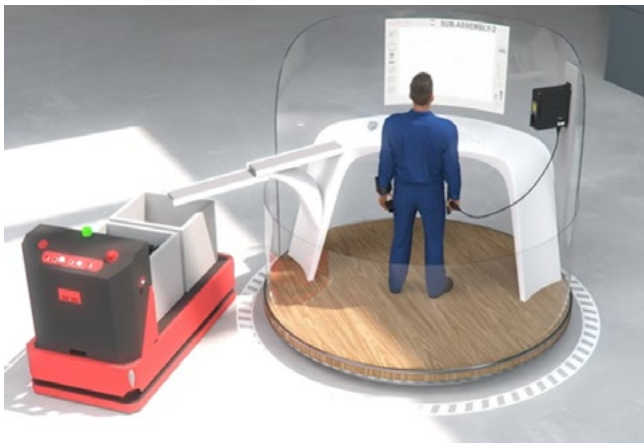
With a range of corded tools managed by AXON, Desoutter has the perfect tightening tool for your application, whether it's a straightforward easy application or one with the highest demands.

The AXON Terminal combines a high-powered drive with a smart module to elevate corded tools to the next level. By utilizing the latest and most efficient components, AXON ensures top performance and seamless integration into any application or work area.

AXON APPLICATIONS

As a unique and dedicated platform for corded solutions, AXON can fit any type of applications:

FIXED WORKSTATION



LIGHT AUTOMATION



HIGH TORQUE APPLICATIONS



SCREWFEEEDING SYSTEMS



SOFTWARE PACKAGE

- EASY CONNECTIVITY AND A USER-FRIENDLY INTERFACE makes for a fast installation and smooth commissioning
- EASY UPGRADE CAPABILITIES AND FLEXIBILITY OF THE TOOL RANGE assures readiness for your future requirements

- ROBUST TOOLS AND HARDWARE BACKUP make for reliable and safe station
- ASSEMBLY QUALITY GUARANTEED with the process control and the error proofing modules

CVI KEY

- Create & manage tailor-made access rights per user profile.

CVI CONFIG

- Set your systems point to point or via network with an intuitive & guided interface.

CVI MONITOR

- Monitor and diagnostic in live your systems. Check directly the I/O and fieldbus for an easy commissioning.

CVI ANALYZER

- Analyse & import/export tightening data with results, curves, filters, profiles.

DEMETER

MONITORING OF PRODUCTION EFFICIENCY

- FULL DATA TRACEABILITY with real-time KPIs
- REAL-TIME DATA AND STATISTICS displayed in customized dashboards
- NOTIFICATIONS MANAGEMENT for a high reactivity on alerts and events
- CURVES ANALYTICS based on AI technology to detect potential defected joints



DE METER
Desoutter

PIVOTWARE

ERROR PROOFING AT THE STATION

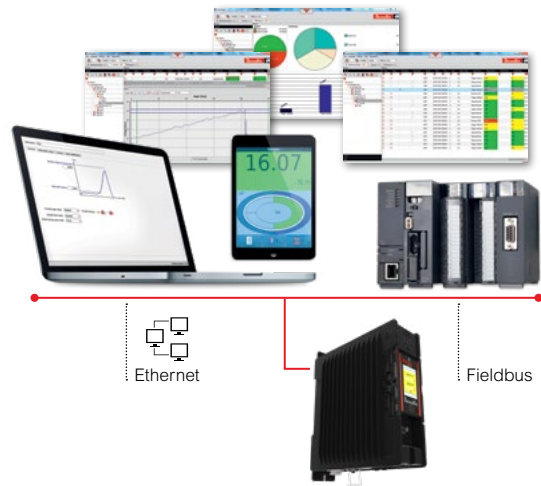
- PROCESS CONTROL to take control of all assets connected at the station
- TRACEABILITY of all actions performed by the users
- OPERATOR GUIDANCE to ensure a good understanding of the required actions
- PROCESS OWNERSHIP with a institutive easy to use programming software



PIVOTWARE
Desoutter

TIGHTENING PROCESS OPTIMIZATION

- NETWORK COMMUNICATION: standard fieldbus & advanced customer protocols
- TIGHTENING STRATEGY: combine flexible steps with different control and different monitoring
- DIRECT VISUALISATION AND ACCESS : simple configuration and results on the Terminal screen and on a remote HMI
- ASSEMBLY PROCESS: control a complete operation with several fastenings and logical requirements (scans, I/O, ...)



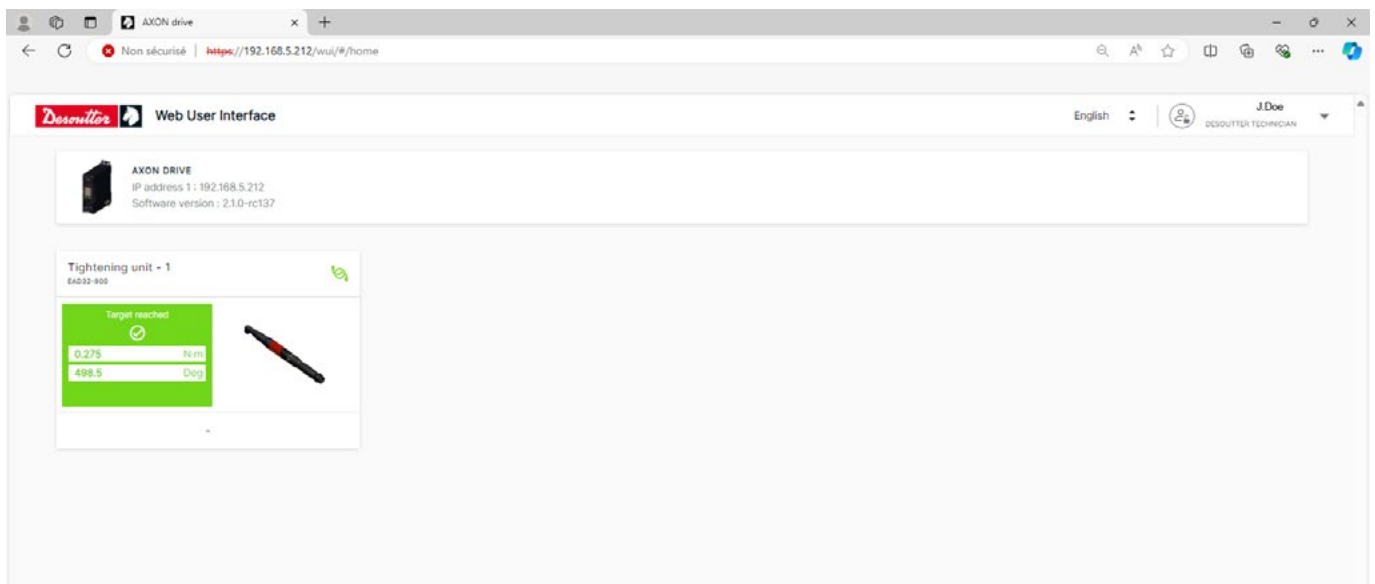
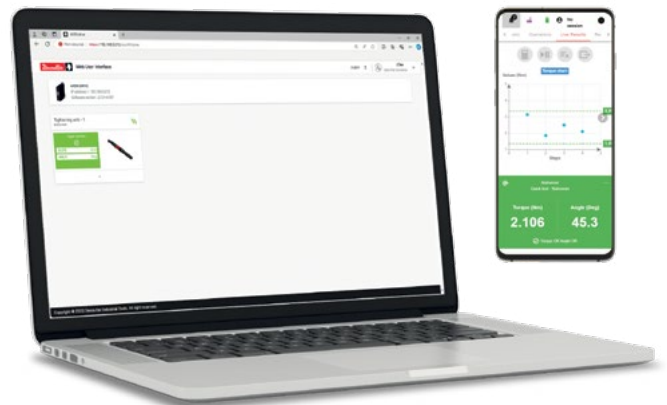
WEB UI INTRODUCTION

In a way of high industrialization, digitalization and automatization, the industries are changing very fast with more and more data centric.

Combining high performance tightening with relevant digital solutions and process control, the collection of valuable data can help to analyze and to identify bottlenecks, streamline workflows, and enhance overall efficiency.

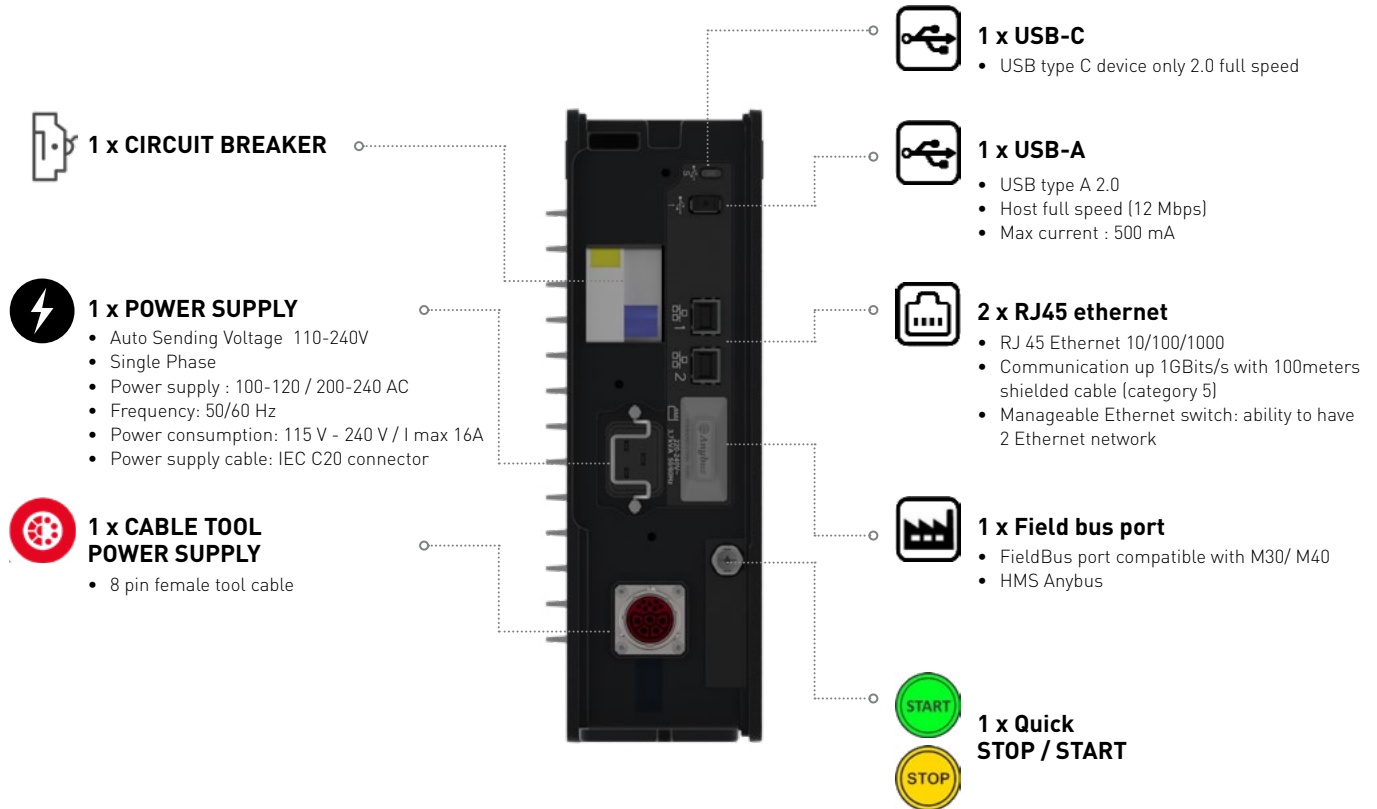
Having an easy and unlimited access to these precise data are key!

AXON comes with an embedded web user interface to have access to several data, anywhere at anytime with no limit of people connected at the same time !



HARDWARE FOCUS

AXON DRIVE: CONNECTIVITY



Weight	6 kg 13,2 lbs
Volume	10,08 dm ³ 615,12 in ³
Order no.	6159327800



HARDWARE FOCUS

AXON MODULE SX: CONNECTIVITY



USER INTERFACE

- Color touch screen 4"
- Resolution : 480 x 320



FUNCTION BUTTON 2

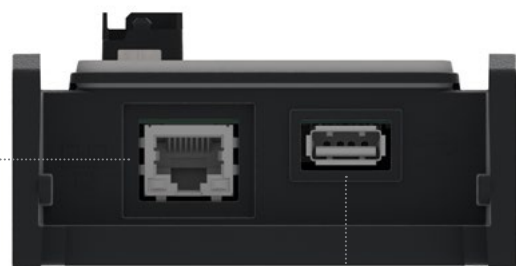
- Boot menu (short press)
- Turn system ON/OFF (long press)



FUNCTION BUTTON 1

- Home page / Main menu (short press)

BOTTOM VIEW



1 x RJ45 ethernet

- RJ 45 Ethernet 10/100/1000
- Power over Ethernet capability [POE]
- 1. 802.3at Type 2 "PoE+" :
- 2. Max power : 30 W
- 3. Max current : 600 mA
- Communication up 1Gbits/s with 100meters shielded cable (category 5)



1 x USB-A

- USB type A 2.0
- Host full speed (12 Mbps)
- Max current : 500 mA



Weight	0,2 kg 0,44 lbs
Volume	0,59 dm ³ 36,00 in ³
Order no.	6159327830

GET WHAT YOU REALLY NEED WITH FEATURE MANAGEMENT

FEATURE MANAGEMENT is a scalable solution in order to provide a high level of flexibility to meet requirements. With feature management, you can add or remove a feature whenever you want or whatever the feature.

TU STANDARD PACK

	TU PREMIUM	TU CORE	TU ESSENTIAL
Number of Psets	10	6	6
Number of APs	10	1	6
Results memory size	20000	20000	20000
Curves memory size	50	50	-
Live Results	Torque, Angle, curve	Torque, Angle, curve	Torque, Angle, curve
Results transfers and storage	Torque, Angle, curve	Torque, Angle, curve	OK/NOK
Tightening strategies	Torque and/or angle control & monitoring	Torque and/or angle control & monitoring	Torque control and angle monitoring
Protocol / Reporting	Open protocol, CVI Net Web, DeMeter, ToolsNet	Open protocol, CVI Net Web, DeMeter, ToolsNet	Open protocol, CVI Net Web, DeMeter, ToolsNet
Advanced Tightening Strategy	-	Seating Detection	

PSET & ASSEMBLY PROCESS

	TU PREMIUM	TU CORE	TU ESSENTIAL
Additional Psets up to 50 Psets	OK	-	-
Additional Psets up to 250 Psets	OK	-	-
Additional APs up to 50 APs	OK	-	-
Additional APs up to 250 APs	OK	-	-

WORKING MODE

	TU PREMIUM	TU CORE	TU ESSENTIAL
Automation control with CVI LOGIX	OK	OK	OK

PROTOCOLS

	TU PREMIUM	TU CORE	TU ESSENTIAL
Desoutter protocol	OK	-	OK***
Curves by Open protocol	OK	-	-
VW protocol (certified with limitations)	OK	-	-
IPM protocol	OK	-	OK
PFCS protocol	OK	-	OK*
FORD protocol	OK	-	OK*
TOYOTA GLOBAL POKAYOKE**	OK	-	OK*

ADVANCED TIGHTENING STRATEGY

	TU PREMIUM	TU CORE	TU ESSENTIAL
Yield point	OK	-	-
Zero torque angle	OK	-	-
Seating detection	OK	INCLUDED	-
Gyroscopoe [eCompass]	OK	-	-

* Technically ready but need to be certified by customer / ** CVI LOGIX is required / *** With TU ESSENTIAL limitation

EXTRA FEATURE

- ADDITIONAL PSET
 A Parameter set is commonly called Pset. A Pset is a tightening process combining one or several steps, each step describing a function
- ADDITIONAL AP
 An Assembly Process, commonly called "AP", is a tightening process which combines one or several assembly actions to proceed in a defined order.
- PROTOCOL
 Protocols manages communication over ethernet between the system and any external devices according to specific "customer" requirements
- AUTOMATION CONTROL
 Extend your automation control with the CVI Logix features to have a complete stand-alone working station
- YIELD POINT
 The yield point detection strategy allows to tighten up to fastener elastic deformation zone
- GYROSCOPE [eCOMPASS]
 Gyro [eCompass] allows to compensate any movement of the operator that might add or remove angle in the assembly
- ZERO TORQUE ANGLE
 The zero torque angle strategy allows to improve consistency of the assembly regardless friction
- SEATING DETECTION
 The seating detection strategy allows constant clamping force independently from the dispersion of torque in the seating zone

ORDERING PARTS

	DESCRIPTION	DETAIL	PART NO.
	AXON Drive	AXD	615 932 780 0
	AXON Module SX	AXM-SX	615 932 783 0
PACK	AXON-SX Essential	AXD + AXM-SX + TU Essential	615 932 797 0
	AXON-SX Core	AXD + AXM-SX + TU Core	615 932 795 0
	AXON-SX Premium	AXD + AXM-SX + TU Premium	615 932 796 0

ACCESSORIES



OPERATOR PANEL*
Operator Interface, with visual and auditory alarms and 3 key switch positions: 6159360720



SOCKET/BIT TRAY*
Socket tray with tubes & inserts: 6159360950
Socket tray: 6159360710
Bit Tray: 6159360800



STACK LIGHT*
4 colors stack light with buzzer, push button and 2 key switch positions: 6159360730



WALL MOUNTING
6158136760



I/O COMMUNICATION*
I/O EXPANDER with 8 configurable inputs and outputs: 6159360740



HMS MODULE
FieldBus port compatible with M30/ M40 HMS Anybus CompactCom
Compatible with : Modbus TCP (AB6446) / Device Net (AB6424) / Ethernet/IP (AB6430) / Profibus (AB6422) / Profinet I/O class A 1 port RJ 45 (AB6425) / Profinet I/O class B 2 ports RJ 45 (AB6431) / CC-link (AB6432) / Profinet IRP/MRP M40 (AB6918) / Ethernet/IP M40 (AB6842)
Part number: check in Desoutter catalog



WITH USB TO CAN KIT*
6158136800



TABLE MOUNTING
Contact your Desoutter representative

*Compatible with CONNECT and with USB to CAN kit for AXON

FIELD BUS MODULES

	PART NO.
Profibus module	615 927 595 0
ProfiNet module (1 port)	615 927 596 0
ProfiNet module (2 ports)	615 927 597 0
ProfiNet IRT module (2 ports)	615 927 070 0
DeviceNet module	615 927 599 0
CC-Link module	615 927 598 0
EtherNet IP module	615 927 594 0
Modbus TCP module	615 927 615 0
CC-Link IE Module	615 927 943 0

EBUS CABLE

	PART NO.
eBUS cable Shielded 1m (3.3ft)	615 917 607 0
eBUS cable Shielded 3m (9.9ft)	615 917 608 0
eBUS cable Shielded 5m (16.4ft)	615 917 609 0
eBUS cable Shielded 15m (49.2ft)	615 917 610 0
eBUS Termination plug	615 917 625 0

POWER CORD

PLUG		PART NO.
A	European	615 917 069 0
B	US NEMA 5-15	615 917 060 0
C	US NEMA 5-20	615 917 063 0
D	UK	615 917 070 0
E	Chinese	615 917 061 0

ACCESSORIES

	PART NO.
eWALLET	615 927 844 0
UV	615 927 843 0

INSTALLATION SHOULD NEVER BE AN AFTERTHOUGHT!



Ensure AXON is fully operational for the start of production

An investment was made in a highly technical product, and you want it to be fully operational immediately, right?

Benefit from the installation and commissioning package for your AXON and ensure your installation is programmed right the first time.

What does installation & commissioning include?

Installation, programming, functional tests, tool calibration, station back-up, capability tests, **operator training, and support during the start of production.**



Avoid production disruptions and extend the lifespan of your tools

Safeguard the reliability and accuracy of your AXON tools with our preventive maintenance solutions to reduce downtime and increase your productivity.

Calibration, Preventive maintenance, Extension of warranty, on-site or at the nearest Desoutter workshop. Select the maintenance you need for your tools.

More Than Productivity