

IQVu

Torque Data Collector



Key features

- ✓ Torque Data Collector and Audit tool
- ✓ Fully rugged & tempered "Gorilla" glass
- ✓ High resolution 7" colour display
- ✓ Interfaces to existing Crane products
- ✓ Peak, Click, Pulse, MoveOn, Yield and Track measurement modes
- ✓ Torque, Angle and Impulse count plus RPM
- ✓ Choice of measurement units
- ✓ Bi-directional measurement of Torque & Angle
- ✓ Upper and lower specification limits, plus control limits for Torque and Angle
- ✓ Display of real time Torque curves
- ✓ Time and date stamped readings
- ✓ Automatic Transducer recognition
- ✓ Password protection for user security
- ✓ Communicates with your PC system

The IQVu is the most revolutionary Torque Data Collector in the world. It combines all of the features of the established TorqueStar with a market leading, robust tablet, to give a modern and familiar product. It provides the ideal solution for the measurement and collection of Torque, Angle, and Pulse data in the manufacturing and quality environment.

The tablet is sleek, thin, but tough, certified to a 1.8m (6') drop rating along with IP65 ingress protection. It has been carefully engineered, down to the chassis, to be protected against drops, shocks, spills, vibration and more. The screen of the IQVu uses Tempered Glass and features LumiBond™ optical bonding. This results in a display that is not only extremely robust and scratch resistant, but also very durable and easy to read in most lighting conditions.

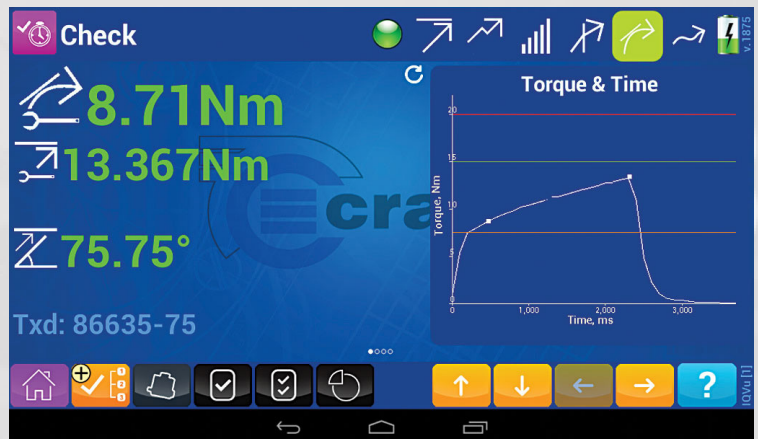


By using ultra-sensitive multi-touch technology the screen has been developed to respond effortlessly to touch, press and drag and it has been designed so that even gloved hands can use the IQVu.

The comprehensive audit tool performs bi-directional measurement in Peak, Click, Pulse, MoveOn, Yield and Track measurement modes. The "Quick Check" function allows the operator to take measurements as required. Work can be scheduled using Rounds and Jobs to allow a planned approach to collecting data. Input of information is either via the soft keypad on the screen or downloaded from OMS or Opta Comms. The IQVu can also be interfaced with a customer's existing data management system.

The high resolution 7" screen clearly displays all the relevant information, using colour to enable the operator to easily view & interpret the information. Throughout the measurement process relevant measurement values are displayed along with a realtime graph of the tightening trace if required.

Measurement readings and associated information are stored on the IQVu. In addition detailed individual readings of traces are stored. All of this information can then be saved to a USB stick or emailed directly from the device.



Alternatively, it can be uploaded to OMS, Opta Comms or another existing database. PDFs of documents, work instructions, photographs, and comments can be loaded onto the IQVu and stored against Jobs.

As well as being loaded from a USB stick, photographs can also be taken using the 5 mega pixel auto focus camera built into the IQVu. This enables the operator to take photographs of applications to store against relevant readings, if required for later analysis. Advanced help functionality is available from all screens.

IQVu *plus*

NEW! The new IQVu *plus* model comes with an improved USB port layout and an additional external battery pack, offering up to 24 hours of continuous use with an intelligent battery management system.



Power Management:	User selectable sleep timer and power saving feature.
Ports:	25 pin female D-type for Transducer connection. DC Power port mains power and charging batteries. USB port to accept connection to PC or USB memory stick. SD card slot. Communications USB ver 2.0 (host and client), Bluetooth (v2.1+EDR class 2), WLAN 802.11 b/g/n.
Camera:	5 Megapixels auto focus camera. Photos can be attached to Job or individual readings.
GPS:	GPS position can be associated with reading.
Time:	Realtime clock. Date and Time stamp for each reading.
Barcode:	Optional Reader available.
Operating Temperature:	-20°C to +50°C.
Humidity:	10-75% non-condensing.
IP Rating:	Tablet is MIL-STD-810G and IP65 certified.
Warranty:	2 years parts and labour against faulty workmanship or materials. The second year of warranty is only valid if the unit has been recalibrated at an authorised Crane Electronics Service Centre after the first year.
Dimensions/Weight:	218mm x 162mm x 44mm, 1040gm (including handstrap).
Work Instructions:	Work instructions in jpeg image or pdf file can be associated with Job.
Readings, jobs and rounds:	Readings can be simply taken using the Check function. Alternatively they can be organised into Subgroups, Jobs and Rounds. All readings can be viewed and stored on the IQVu and analysed using the Graph and Statistics function.
DC Tool connection:	The IQVu can talk to a DC Tool Controller using Open Protocol over Wi-Fi and associate the Tool reading with a reading from Transducer.
Export:	Torque readings can be exported as a CSV file user reports.

IQVu - Product Codes

IQVC1-OTT1-CRXXRX
IQVC1-OTT1-CRXXRB

IQVu Torque (IQVu and Torque Module combined)
IQVu Torque with Integrated Barcode Reader (IQVu and Torque Module)

IQVu - Accessories

IQVU1-0001-CRXXRX
IQVU1-0001-CRXXRB
IQVT1-0T00-CRXXXX
IQVUS-0000-CRPXXX
CBL-7025-02CR-0-0

IQVu
IQVu with Integrated Barcode Reader
IQVu Torque Module
IQVu Power Supply
CheckStar Multi Cable

For a complete quote on the IQVu or IQVu plus, please contact sales@crane-electronics.com or call 01455 25 14 88.

IQVu plus - Product Codes

IQVC2-OTT1-CRXXRX
IQVC2-OTT1-CRXXRB
IQVC2-OTT2-CRXXRX
IQVC2-OTT2-CRXXRB

IQVu plus (Jobs Only)
IQVu plus (Jobs Only) and Integrated Barcode Reader
IQVu plus (Jobs Only & Tool Certification)
IQVu plus (Jobs & Tool Certification) and Integrated Barcode Reader

Physical measurements:	Bi-directional Torque and Angle*; Pulse count, Pulse rate; RPM* (*when using a Rotary Torque Transducer with Angle encoder in Track mode).
Measurement Units:	Nm, Ncm, lb ft, lb in, oz in, kNm, klb ft, kg m, kg cm.
Measurement Modes:	Peak, Click, Pulse, MoveOn, Yield and Track.
Automatic Transducer:	Torque range, Angle encoder PPR, Transducer serial number, Calibration due date recognition torque@2mV/V (CheckStar Multi only).
Types of Transducer:	CheckStar Multi, UTA and IS (CheckStars and Wrenches).
PC compatibility:	Communicates with OMS and Opta Comms.
Data storage:	16GB storage, Micro SDHC (up to 32GBBytes) slot.
Processor:	1GHz Dual Core Processor.
Operating system:	Android 4.1.
Statistics:	Count, Mean, Standard Deviation, Range.
Print:	Wi-Fi printer (TBC).
Display:	7.0" TFT LCD WSVGA, 1024 x 600 pixels resolution, adjustable brightness. Touch sensitive with gloves worn. Tempered glass featuring LumiBond®.
Cycle status indicators:	Colour, Sound and Vibration (all user definable). External light ring indication on CheckStar Multi.
Graph of tightening:	Available in realtime, resolution down to 1mS. Zoom feature available. Trace: Torque vs Time (default), Angle versus Time and Torque versus Angle.
Data entry:	Numeric and Alphanumeric via soft keypad on screen. User interface via graphical icons that are language independent.
Operating language:	English, French, German, Spanish, and Chinese - Toggle between multiple languages.
Transducer calibration:	Transducer out of calibration warning.
Construction:	Soft rubber trim surrounding tough internal chassis. Tablet will survive 1.8m (6 ft) drop.
Torque measurement:	5 digit display with resolution to 0.006% of Transducer span. Sampled every 20 micro seconds (50,000 per second).
Zero stability:	< 0.1% FSD / °C.
Static accuracy:	+/-0.25% FSD of connected Transducer.
Angle measurement:	Display angle to 0.01 degrees. Sample every 1000 micro seconds. Adapts to PPR of angle Transducer using quadrature phase measurement.
Security:	IQVu protected by SOTI MobiControl, which allows preset control of downloads and uploads to the device. Multiple user logins with password protection.
Frequency response:	User selectable 75Hz to 5000Hz low pass Bessel Filter is employed for conditioning the Transducer signal to eliminate 'noise' from tool measurement.
Power:	International Charger 12V @ 2 A from 100-240VAC; 50/60Hz.
Batteries:	Internal Lithium Polymer battery pack with 7600mAh capacity. 8 hour shift with normal usage. The IQVu <i>plus</i> model comes with additional external battery pack allowing for continued use with a battery management system.

With the addition of a barcode reader (optional integrated or external) the operator is able to scan information into the IQVu. This includes product or part identifiers, user details, comments and references.

Security of the IQVu and any data collected is a priority for users. All data can easily be backed up to an external source with minimal key presses. Equally such data can be restored to the IQVu with the same ease.

The integrity of the IQVu is protected by a world leading software security package, installed on the IQVu before shipping. This ensures that no software can be loaded onto the IQVu without authorisation and email traffic is strictly controlled.

With Wi-Fi, RF, Bluetooth and 3G available, the IQVu can be connected 24/7 wherever you are, allowing you to improve productivity.

The IQVu works with all existing Crane products including the increasing range of Crane wireless devices, allowing further flexibility when collecting data.





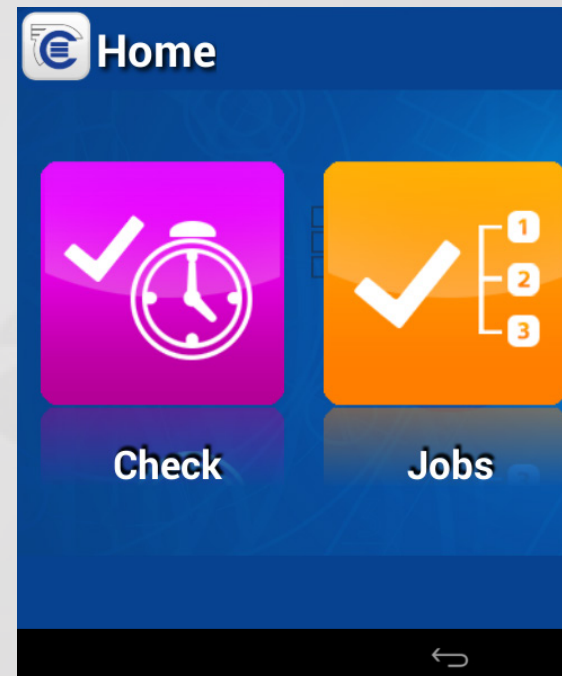
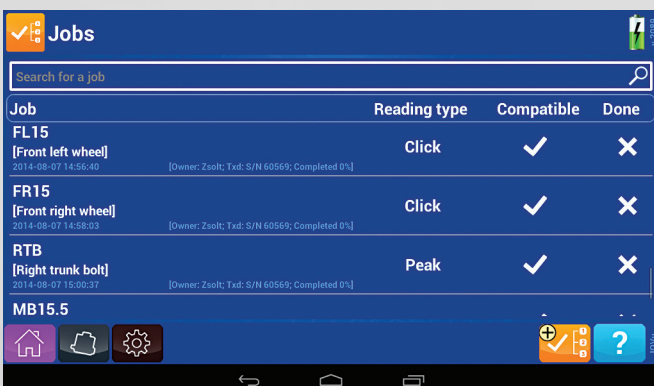
Name	S/N	Type	Span,Nm	Port	PPR	Battery
75Nm T&A	77307	0	75	2	180	N/A
75Nm T&A	86635	0	75	3	720	N/A
180Nm T&A	91996	0	180	4	180	N/A
10Nm T Only	12345	0	10	5	180	N/A
***	***	***	***	*RF1	***	***
***	***	***	***	*RF2	***	***
***	***	***	***	*RF3	***	***

Transducers

- ✓ Designed to work with the new CheckStar Multi
- ✓ Compatible with in-line UTA & IS Rotary Torque Transducers
- ✓ Torque, Angle and Pulse count
- ✓ Setup user defined names for all connected Transducers
- ✓ Automatic recognition of Crane Transducers

Home Page

- ✓ Simple menu structure for ease of use
- ✓ Large icons for easy navigation when wearing gloves

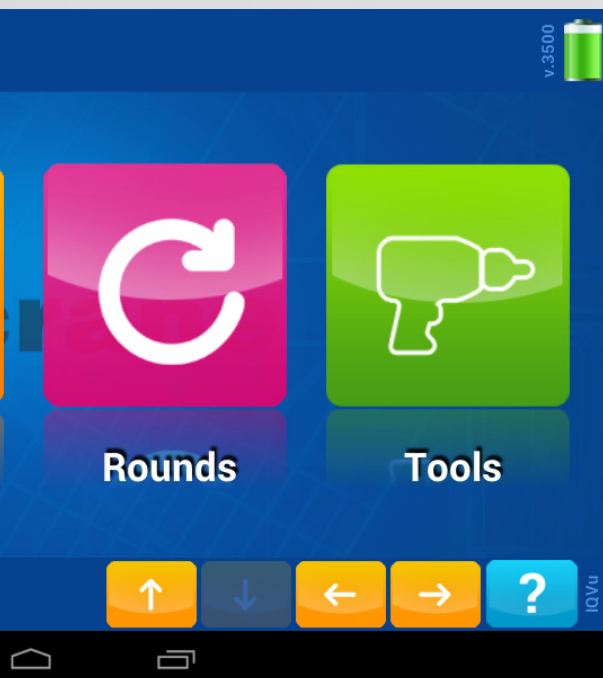



Job	Reading type	Compatible	Done
FL15 [Front left wheel] 2014-08-07 14:55:40 [Owner: Zsolt; Txd: S/N 60569; Completed 0%]	Click	✓	✗
FR15 [Front right wheel] 2014-08-07 14:58:02 [Owner: Zsolt; Txd: S/N 60569; Completed 0%]	Click	✓	✗
RTB [Right trunk bolt] 2014-08-07 15:00:37 [Owner: Zsolt; Txd: S/N 60569; Completed 0%]	Peak	✓	✗
MB15.5			

Jobs

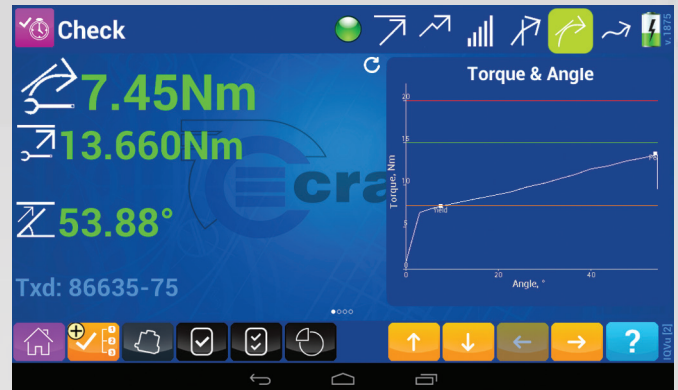
- ✓ Assign photos and instructions to Jobs
- ✓ Simply add a name to convert Check Measure into a Job
- ✓ Clear and simple Job list including progress monitor
- ✓ Download Jobs from PC via existing Crane PC Software
- ✓ Sort Jobs into Rounds
- ✓ Provide statistical analysis

- ✓ Familiar “swipe” gesture to reveal more options
- ✓ Battery charge status always visible



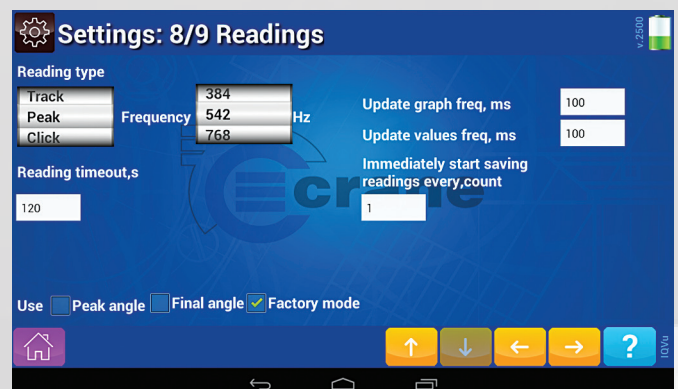
Settings and Users

- ✓ Easily configure global settings
- ✓ Add users with permissions, access rights & photos
- ✓ Password protection available
- ✓ User selectable languages
- ✓ Trace readings to user
- ✓ Easy backup and restore of settings



Check Measure

- ✓ Take measurements with minimal key presses
- ✓ 1 click change between measurement modes
- ✓ Large display with reading values & rundown trace
- ✓ Peak, Click, Pulse, MoveOn, Yield and Track measurement modes
- ✓ Zoom into trace
- ✓ Save details to USB/Email



Complete torque management systems from Crane Electronics



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