

# The force in torque management



# IQVu-2

**Torque Data Collector** 



The IQVu-2 is the latest in a long line of innovative torque data collectors from Crane. The new IQVu-2 series delivers the reliable and precise torque measurement and recording capabilities that our data collectors deliver, along with a state-of-the-art versatile and rugged tablet.

The IQVu-2, working alongside our digital torque wrenches or torque transducers, allows manufacturers to test, audit, record and store critical assembly data, whether it be for the critical fasteners used in the construction of a product, or the variety of power and hand tools used in the assembly process itself.

The IQVu-2 tablet offers a larger, clearer 10.1" screen to view all activity, with a responsive Gorilla® Glass touch screen that can be operated by bare or gloved fingertips. The interchangeable battery system allows for simple power management during production shifts and the reduced size torque module design makes it even easier to use in demanding environments.

Traceability, and the power to measure and record assembly data quickly and easily, is one of the most important aspects in assembly and manufacturing environments today. The IQVu-2 helps deliver a premium solution using Crane's first-class torque software system within a modern and powerful tablet.





## **Key Features**

- Versatile and rugged tablet with a super bright 10.1 in. display
- Multi mode capacitive touch with bare or gloved fingertip input
- 5ft/1.5m tablet drop protection to concrete, exceeds MIL-STD-810H
- Multiple torque and angle measurement modes including Pulse, Yield Track and MoveOn
- Control target, upper and lower limits for torque specifications
- Display of real time torque measurement curves
- Assembly actions can be scheduled using 'Jobs' and 'Rounds',
   allowing a planned approach to measuring and recording critical data
- Time and date stamped readings can quickly and easily be transferred to your PC or existing system
- Automatic Crane transducer and wrench recognition
- Individual operator profiles and password protection for user security



#### **Precision Torque Measurement**

The IQVu-2 torque data collector is a versatile tool designed for comprehensive assembly and quality control. It supports bi-directional measurements across various modes, including Peak, Click, Pulse, MoveOn, Yield, and Track.

With its intuitive 'Check' function, operators can take quick measurements as needed. The device also allows for work to be scheduled through 'Jobs' and 'Rounds', allowing a planned and organised approach to data collection.

## **User-Friendly and Simple Data Management**

Featuring a super bright 10.1" display, the IQVu-2 presents information clearly, utilising Crane's user-friendly colour icon system for easy navigation. During the measurement process, operators can view relevant values and real-time graphs of tightening traces.

All readings and detailed traces are stored on the device, with options to save data to a USB or send it directly from the tablet. Additionally, data can be uploaded to Crane's OMS software or integrated with existing data management systems. Users can also store PDFs, work instructions, and images against specific jobs.

## **Connectivity and Functionality**

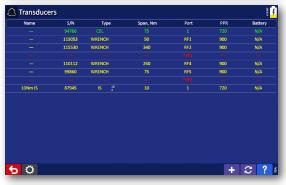
The device also offers multiple connectivity options to your PC or existing system, including Wi-Fi, RF, and Bluetooth, ensuring it can stay connected when needed.

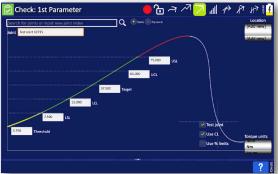
For functionality the IQVu-2 is compatible with existing Crane tools such as the CheckStar Multi rotary transducers or the WrenchStar Multi digital torque wrenches. These products can connect either wirelessly via RF or through a cable connection, providing flexibility for efficient data collection and improved productivity.

Data security is also a top priority for the IQVu-2. Users can effortlessly back up and restore their data with just a few key presses and the tablet is equipped with a range of advanced security features.













## **Assembly & Quality Control**

The IQVu-2 data collector is used to test the torque levels of individual joints and fasteners on the actual product, during both the assembly, auditing and quality control stages of production.

Here, the IQVu-2 can be utilised with our Check-Star Multi torque transducers whilst fastening with other tools or our range of WrenchStar Multi digital torque wrenches for directly fastening or auditing.

In order to ensure that any potential torque issues can be discovered as quickly as possible, manufacturers can also deploy quality control teams with an IQVu-2 at different stages of the production process to randomly and regularly spot check torque results on their products and tools to capture any potential issues that may arise.

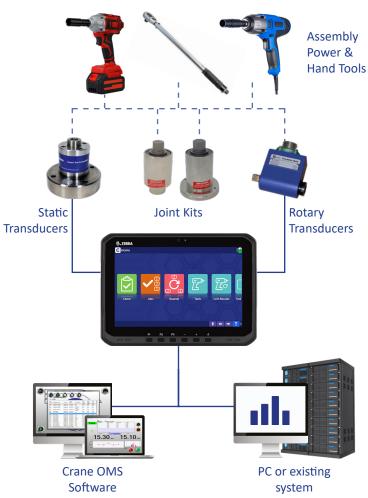
# **Tool Torque Testing & Auditing**

The IQVu-2 can also be used for the testing and auditing of assembly power tools, using rotary or static torque transducers and joint kits to monitor and analyse the torque readings that each individual tool is applying.

Manufacturers can routinely process assembly tools with data measured and logged in the IQVu-2. This helps manufacturers ensure that all assembly tools are performing as they should be, safeguarding the integrity of the whole production process.

Tools that are found to have dropped out of the required torque range can be extradited for calibration and any potentially affected components can then be audited in return, reducing any potential disruption to the production process.





## The Importance of Torque Measurement and Data Collection

The collection, recording, and storage of torque data is vital for traceability and risk management during assembly and quality auditing. Manufacturers must adhere to specific torque standards, not only to comply with regulations but also to assure customers of their commitment to quality. Accurate torque measurement enhances a company's reputation for producing precision-engineered products, providing peace of mind for both manufacturers and end-users.

Neglecting torque measurement and data recording can lead to minor quality issues that disappoint customers and generate complaints. In more severe cases, failures in critical fasteners can pose significant safety risks, resulting in potential injuries or worse. Such incidents can severely damage a manufacturer's reputation and incur substantial financial costs from fines, compensation claims, product recalls, and lost future sales. Prioritising torque measurement is essential for ensuring product safety, quality and overall business success.





The IQVu-2 exemplifies Crane's commitment to innovation and precision. With its reliable torque measurement and recording capabilities, this rugged tablet seamlessly integrates with our range of digital torque wrenches and transducers, enabling manufacturers to test, audit and store critical assembly data efficiently.

With a focus on traceability and ease of data collection, the IQVu-2 delivers a comprehensive solution that enhances many assembly processes and helps to ensure high product quality, making it an indispensable tool for today's demanding manufacturing environments.

Selected Items	Product Code	Product
IQVu-2	IQV2A - 0000 - CRCXRX	Data Collector
Zebra Tablet Only	IQV2A - 0000 - CRTXRX	Accessories
IQVu-2 Torque Module & Software Only	IQV2A - 0000 - CRMXRX	Accessories
IQVu-2 Battery	IQV2S - 0000 - CRXBXX	Accessories
IQVu-2 Power Supply	IQV2S - 0000 - CRXPXX	Accessories
IQVu-2 Docking Station	IQV2S - 0000 - CRXDXX	Accessories
IQVu-2 Web Services (one-off charge)	IQVS1-0001-CRWSXX	Accessories



#### **IQVu-2 - Technical Specifications**

**Zero Stability** < 0.01% FSD / °C

Static Accuracy +/- 0.2% FSD of connected transducer

**Operating Temperature** +5°C to +40°C

**Humidity** 10-75% non-condensing

IP Rating Torque Module - IP40, Tablet - IP66

Data Storage 128 GB Storage, Micro SHDC (up to 2GB) slot

**Processor** Qualcomm<sup>®</sup> 6490 octa-core; 2.7 GHz

Operating System Upgradeable to Android 16

**Display** 10.1 in. WUXGA (1920 x 1200)—1,000 nits; optically bonded to touchpanel

Multi mode capacitive touch with bare or gloved fingertip input or conductive

stylus (sold separately);

Corning® Gorilla® Glass; Water droplet rejection; fingerprint resistant,

anti-smudge coating

Power/Battery Re-chargeable Lithium-Ion battery - capacity 8,920 mAh

10 hours indoor use (WLAN on, 50% backlight)

2.5 hrs to charge from 4% to 80% with 45 W power supply Charging through USB Type-C (USB PD3.0 compatible)

**Security** Multiple user logins with password protection

Stand Can lie flat or be angled on desk for ease of viewing with built in stand

Carrying Can be held in either hand and comes with hand and wrist straps

Optional shoulder strap

**Ports** 25-pin female D-type for transducer connection

2 x USB 3.1 Type A Ports; 1 x USB 3.1 Type C Port

Docking connector (charge and data)

Camera Front - 16 MP autofocus; flash LED generates balanced white light

Back - 8 MP; mechanical privacy shade

**Physical Measurements**Bi-directional torque and angle\*; Pulse count, Pulse rate; RPM\*\*

\*Angle measurement is only available when using a rotary transducer with angle encoder.

\*\*RPM is only available when using a rotary transducer with angle encoder in Track mode

Measurement Units Nm, Ncm, lbf.ft, lbf.in, oz in, kNm, klb ft, kg m, kg cm

Measurement ModesTrack, Peak, Angle, Click, Pulse, Audit, Yield, MoveOn and MoveOn AdvancedAutomatic TransducerTorque 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 (CheckStar & Static), WrenchStar Multi

PC Compatibility Communicates with OMS torque management software

Statistics Count (Cp), Mean (Cpk), Standard Deviation (Cm), Range (Cmk)

**Cycle Status Indicators** Colour, sound and vibration (all user definable)

External light ring indication on CheckStar Multi and WrenchStar Multi

**Graph of Tightening** Available in real-time, 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

### **IQVu-2 - Technical Specifications cont.**

Operating Languages English, Chinese, Czech, French, German, Italian, Spanish, Swedish, Polish,

Portuguese, Turkish

**Torque Measurement** 5-digit display

Resolution to 0.006% of transducer span

Sampled every 20 microseconds (50,000 per second)

Angle Measurement Display angle to 0.01 degrees

Sample every 1000 micro seconds

Adapts to PPR of angle transducer using quadrature phase measurement

Frequency Response User selectable 75Hz to 5000Hz. A low pass Bessel Filter is employed for

conditioning the transducer signal to eliminate 'noise' from tool measurement

Time Real-time clock

Date and time stamp for each reading

**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-2 and analysed using the Graph and Statistics function

Jobs can be specified for specific, similar or any transducer

Control limits are possible

**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

**Communication** Communicates via USB-C, USB-A, Wi-Fi, RF, Bluetooth

**DC Tool Connection** The IQVu-2 can talk to DC Tool Controller using Open Protocol over Wi-Fi and

associate the tool reading with a reading from transducer

**Data Export**Torque readings can be exported as CSV file and so can be used in an Excel

template to generate user reports

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Crane Electronics has a worldwide network of dedicated distributors located across the globe. For your nearest official Crane distributor, please visit www.crane-electronics.com.



