TorqueStar Opta Torque Indicator and Data Collector





TorqueStar Opta is the equipment of choice for the measurement and collection of torque date in the manufacturing environment.

TorqueStar Opta's range of software features can be individually specified to give a configuration most suited to the requirement, from a simple no-frills readout to a comprehensive audit tool with display of torque tools curves and specialist measurement routines.

The basic TorqueStar Opta performs bidirectional measurement of torque, angle and pulse count in track, peak, 1st peak (click) and pulse measurement modes. For addition information, cycle time duration and tool speed can also be displayed. Force can be measured independently. Time and date stamped readings can be set to print automatically. The easy to read display gives a simultaneous view of all relevant information during the measurement process, while the simple alphanumeric keypad enables fast data entry when required.

Light enough for carrying on a neck strap, yet robust to withstand the rigours of the factory environment, TorqueStar Opta also sports integrated rubber bumpers to protect finished product from accidental damage.

Key features

- ✓ Torque or force indicator and data collector
- ✓ Simple readout to comprehensive audit tool
- ✓ Display of torque curves and specialist measurement routines
- ✓ Torque, angle and impulse count.
- ✓ Track, peak, 1st peak (click) and pulse measurement
- ✓ User selectable frequency response
- ✓ Choice of measurement units
- ✓ Bi-directional measurement of torque and angle
- ✓ Upper and Lower Specification limits, plus Control Limits for torque and angle
- ✓ Time and date stamped readings with selectable auto print
- ✓ Automatic transducer recognition
- ✓ Icon based clear and easy read display
- ✓ User selectable language options
- ✓ 8 hours battery life with external charger
- ✓ Password protection for user security
- ✓ Communicates with your PC system

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Compatible with the TorqueStar



CheckStar Rotary Transducer In-line torque management

> tJRS Opta Fully automated threaded joint simulator

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Stationary Transducer Off-line torque management

> CheckStar Multi In-line rotary torque transducer



Joint Kits Used with stationary transducers and CheckStars to simulate production joint conditions



Product Codes

TO-890-01CR-0-UK/EUR/USA TO-890-02CR-0-UK/EUR/USA TO-890-03CR-0-UK/EUR/USA TO-890-04CR-0-UK/EUR/USA TO-890-05CR-0-UK/EUR/USA TORQUESTAR OPTA BASIC (NORMAL CHARGE) (NO STORAGE) TORQUESTAR OPTA BASIC (FAST CHARGE) (NO STORAGE) TORQUESTAR OPTA II (NORMAL CHARGE) (200 READINGS) TORQUESTAR OPTA II (FAST CHARGE) (200 READINGS) TORQUESTAR OPTA IV (NORMAL CHARGE) (ADVANCED STORAGE) TO-TORQUESTAR OPTA VI (FAST CHARGE) (ADVANCED STORAGE)

TorqueStar Opta Software

OM-899-03CR-0-0	GRAPHS DISPLAY FOR OPTA
OM-900-01CR-0-0	OPTACOMMS (ENABLEMENT & DISC)
OM-900-99CR-0-0	OPTACOMMS+
OM-900-04CR-0-0	EXCEL GRAPH UPLOAD

Accessories List

TorqueStar Opta carry case* Carrying Case and Cables RS232 Cable Torquestar to RS232 port Printer Adapter OptaComms TO-890-07CR-0-0 TO-890-08CR-0-0 CBL-757-0-0-0 CBL-758-01CR-0-0 OM-900-01CR-0-0

*Included free of charge if any Opta software modules are bought at the same time as the base unit



Menu/Screen Examples





TorqueStar Opta Technical Specification:

Special features:	Upgradeable via enablement of software modules to add multiple traces (torque vs time or 2nd parameter, 2nd parameter vs time), data storage, audit scheduling, and other options. Quick measure enabling measurements to be taken following a simple key press. Auto return to previous used screen following power-on. Text attributes are also possible in Advanced modules. Upgradeable software.
Physical measurements:	Bi-directional torque; angle*; pulse count; RPM*; cycle time duration (*when using rotary transducer with angle encoder; in track mode)
Measurement units:	Torque: N m, N cm, kg cm, kg m, kN m, Klb ft, N mm, oz in, lb in, lb ft Force: kg, kkg, lb, klb, N, kN
Measurement modes:	Track – real time torque Peak – capture of highest torque value during the cycle 1st peak (click) – capture of instantaneous torque value as torque limiting wrench mechanism operates Pulse – special measurement algorithm for use with impulse tools, incorporating pulse count Force – capture of peak force during the cycle
Plug & Play transducer Data:	 The following information is read from the chip incorporated in the UTA transducer device: Torque range, angle encoder data, serial number, calibration due date Other transducers: Compatible with industry standard transducers. Up to 9 IS transducers can be pre-set to enable easy selection
PC compatability:	Via OptaComms PC communication software of Opta Management software
Data storage:	Not available on basic model – see product codes
Statistics:	Not available on basic model – see product codes
Auto-print:	Switchable auto print to compatible printer and RS232 Terminal Emulator
Cycle status information:	Tri-colour LED HI/OK/LO torque status with appropriate upgrade module Audible buzzer
Graph Analysis:	Zoom, Change Axis, Average, Resize, Move
Operating languages:	Czech; Dutch; English; French; German; Italian; Spanish; Swedish; Polish; Turkish.
	Can toggle between languages at virtually all menu points without need to exit operating mode



Transducer Calibration Date:	Visible indication of transducer calibration date
Construction:	High strength injection moulding Protective rubberised trim to alleviate secondary damage to products
Display:	62 x 62mm becklit graphic LCD display, 160 x 160 pixel resolution, with high quality optical screen protection, 4 digit display of torque value
Keypad:	Easy clean membrane keypad with alphanumeric keys for ease of data entry
Frequency response (Hz):	A low pass frequency filter is employed for conditioning the transducer signal to eliminate 'noise' from the tool measurement This is user selectable from the following discrete values: 4608, 3072, 2304, 1536,1024, 921, 768, 542, 384, 307. 256, 151, 75
Power:	Universal 15V charger
Battery pack:	Nickel Metal Hydride
	Useable battery life: 8 hours* (standard) 6 hours* (fast charge)
Deveryone and the	Charge time: 16 hours (standard) 3 hours (fast charge)
Power management:	or 16 hours
Input/Output porto	Screen contrast adjustment
Printer compatibility:	Serial Printer: 40/80 columns: 9600 baud rate: 8 data bits: 1 ston bit:
Printer compatibility.	no parity
Processor:	Hitachi embedded processor
Zero stability:	<± 0.1% FSD/ °C
Static accuracy:	± 1% FSD of connected transducer
Operating environment:	Temperature: 5 – 40 °C
	Humidity: 10 – 75% non-condensing
	Ingress protection rating: IP40 – Designed for indoor use only
Angle measurement:	Quadrature phase to give 0.5°C resolution
Dimensions:	225 x 165 x 122mm (8 7/8" x 6 ½" x 6 1/2 " x 4 7/8")
Warranty:	12 months parts and labour against faulty workmanship or materials





Complete torque management systems from Crane Electronics



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