

Key Features



- ✓ Easy-read display with simultaneous display of all relevant information
- ✓ Tailored to your requirements – from simple readout to comprehensive audit tool and more
- ✓ Communicates with your PC system
- ✓ Interchangeable transducer units with vertical or horizontal axis
- ✓ Software shared with TorqueStar Opta

Product Overview

DTT Opta introduces a world of choice, features and flexibility to the tool test environment, with interchangeable transducer modules and software tailored to the application requirement.

These options allow DTT Opta to be configured to closely match the user requirements, and a selection of transducer units can be made available to the operator to cover a broad torque range. Different transducer units are available with the transducer axis in either the vertical or horizontal place.

In common with the Opta product family, DTT Opta's range of software features can be individually specified giving variations from a simple no-frills readout to a comprehensive audit tool with display of torque curves and specialist measurement routines. As the software is common throughout the Opta product family, users familiar with the TorqueStar Opta will already know how to use DTT Opta, and vice-versa.

The basic DTT Opta performs bi-directional measurement of torque in track, peak, 1st peak (click) and pulse measurement modes, when pulse count is also measured. Cycle time duration can also be displayed. Time and date stamped readings can be set to print automatically on the external printer. The easy-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.

DTT Opta Technical Specification - base unit

Special features	<p>Upgradeable via enablement of software modules to add traces (torque vs time or 2nd parameter; 2nd parameter vs time), data storage, audit scheduling, and other options (please refer to separate information sheets)</p> <p>Quick measure enabling measurements to be taken following a single key press</p> <p>Auto return to previous used screen following power-on</p>
Physical measurements	Bi-directional torque; pulse count; cycle time duration
Measurement units	N m, N cm, kg cm, kg m, kN m, Klb ft, MN m, N mm, oz in, lb in, lb ft
Measurement modes	<p>Track – real time torque</p> <p>Peak – capture of highest torque value during the cycle</p> <p>Click-dip – capture of instantaneous torque value as torque limiting wrench mechanism operates</p> <p>Pulse – special measurement algorithm for use with impulse tools, incorporating pulse count</p>
Plug & Play transducer data	<p>The following information is read from the UTA chip incorporated in the transducer device:</p> <p>Torque range, serial number, calibration due date</p>
PC compatibility	Via OptaComms PC communication software
Data storage	See comparison table
Statistics	See comparison table
Auto-print	Switchable autoprint to compatible external printer
Cycle status indication	<p>Tri-colour LED HI/OK/LO torque status with appropriate upgrade module</p> <p>Audible buzzer</p>
Graphic analysis	Not available on basic model – see available upgrades
Operating language	<p>English, Czech, Dutch, French, German, Italian, Spanish, Swedish, Polish, Turkish</p> <p>Can toggle between languages at virtually all menu points without need to exit operating mode</p>
Construction	Rugged aluminium case
Display	62 x 62mm backlit 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)	<p>A low pass frequency filter is employed for conditioning the transducer signal to eliminate “noise” from the tool measurement</p> <p>This is user selectable from the following discrete value:</p> <p>4608, 3072, 2304, 1536, 1024, 921, 768, 542, 384, 307, 256, 151, 75</p>
Power	Universal 15V charger
Battery pack	Nickel Metal Hydride
Useable battery life	8 hours*
Charge time	16 hours*
Power management	User selectable auto power off: never, 1, 2, 5, 10, 20, 30, 40, 60 minutes or 16 hours
Input/output ports	9 pin RS232 port (female)
External printer compatibility	Serial 80 column printer, 9600 baud rate
Processor	Hitachi embedded processor
Zero stability	< + 0.1% FSD/°C
Static accuracy	+ 1% FSD
Operating environment	<p>Temperature: 5-40°C</p> <p>Humidity: 10-75% non-condensing</p> <p>Ingress protection rating: IP40 - designed for indoor use only</p>

*Backlight on, transducer connected, 50% duty cycle – no printer

Warranty	12 months parts and labour against faulty workmanship or materials
Dimensions	Complete unit: 255 x 255 x 79mm (10 3/8" x 10 3/8" x 3 1/8") Individual transducer unit: 105 x 85 x 79mm (4 1/8" x 3 3/8" x 1/8")
Weights	DTT Opta unit without transducer or printer module: 3.5 Kg Transducer unit: 1.3 Kg Printer unit: 220 gms
Shipping list	DTT Opta unit with basic operating software Basic storage and statistics module Charging unit with appropriate power cable for order code Carry case

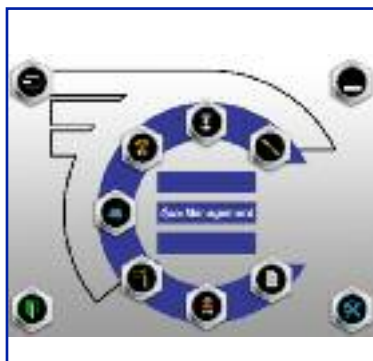
DTT Opta Technical Specification - interchangeable transducer units

Functional Attributes

Special features	Easily interchangeable modules available with transducer axis in vertical or horizontal plane
Tool compatibility	All torque tools, including impulse tools (not impact tools) Joint kit supplied with vertical axis transducers for use with continuous drive and impulse tools to represent joint conditions
Physical measurements	Bi-directional torque (clockwise calibration unless otherwise specified)
Auto ID	The DTT base unit reads the following information from the UTA chip incorporated in the transducer device: Torque range, serial number, calibration due date

Physical Attributes

Calibration	Issued with calibration certificate traceable to National and International Standard IS transducers are normalised calibration unless indicated in table Standard Crane calibration: 10 points; single direction; from 10% to 100% of normal torque UKAS calibration: calibration to BS 7882 Recalibration is recommended every 12 months
Construction	Aluminium housing Overload capacity: 125% rated torque Square drives to ANSI B107-4 – 1982; BS4006 – 1992; DIN 3121 – 1987
Zero stability	< + 0.1% FSD/°C
Static accuracy	+ 1% FSD
Operating environment	Temperature: 5-40°C Humidity: 10-15% non-condensing
Ingress protection rating	IP40 - designed for indoor use only
Warranty	12 months parts and labour against faulty workmanship or materials
Shipping list	Transducer unit Joint kit (vertical axis transducer units only)



OMS

- ✓ Single database to store torque information from all departments
- ✓ All data completely traceable and secure



tJRS Opta

- ✓ A joint simulator using a threaded fastener and nut
- ✓ Fully automatic quick release of fastener



IQWrench2 Opta

- ✓ Point of load insensitive
- ✓ Interchangeable head attachments with auto ID and calibration



TorqueStar Opta

- ✓ Torque or force indicator and data collector
- ✓ Simple readout to comprehensive audit tool



CheckStar

- ✓ In line transducer with optional angle measurement
- ✓ Accuracy +/- 0.25% of full scale



Service Centres

- ✓ Centres throughout the world
- ✓ Fully traceable calibration and repair service

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