

TORQ-HUB

99%
Accurate Torque
Readings



CONCEPT

TORQUE SOLUTIONS INC.

WWW.CONCEPTTORQUE.COM



99% Accurate Torque Readings

Concept Torque Solutions is pleased to announce their latest product, the Torq Hub. Utilizing the same patented technology as our Torq Pin product, it delivers over 99% accurate torque readings. Data is sent over a robust 2.4 GHz RF FHSS signal to the handheld display/datalogger.

The Torq Hub reliably and accurately measures torque forces in either ft/lb or N-m, as well as pile/ anchor inclination.

This torque monitoring and data logging device is intended to replace the Kelly Bar Adaptor or mount directly onto the drive head output shaft. It is available in 2", 2-1/2", 2-5/8" & 3" hex kelly shaft sizes.



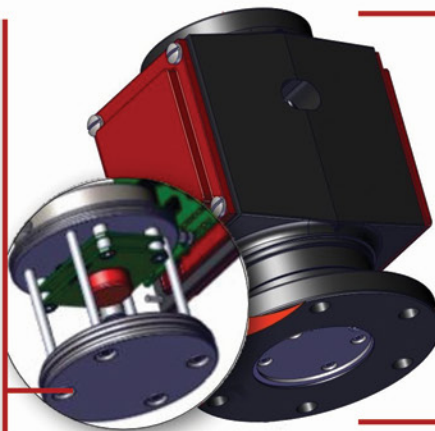
Wireless signal is 2.4 GHz FHSS RF. Outdoor range — up to 2.5 miles (4 km) Frequency Hopping Spread Spectrum technology allows clear communication across up to 79 frequencies

7" Window OS LCD touchscreen in a rugged ABS casing. Designed to IP67 ingress protection.

Circuit boards, firmware and software all designed by CTS specific to the application. Fully potted, sealed, gasketed and cushioned to ensure maximum protection and long life.



The heart of the Torq Hub is the PCB containing a microprocessor which converts the analog strain gage unput to a digital signal which is transmitted over a robust 2.4 GHz RF Signal



Available with 2", 2-1/2", 2-5/8" & 3" hex input shafts

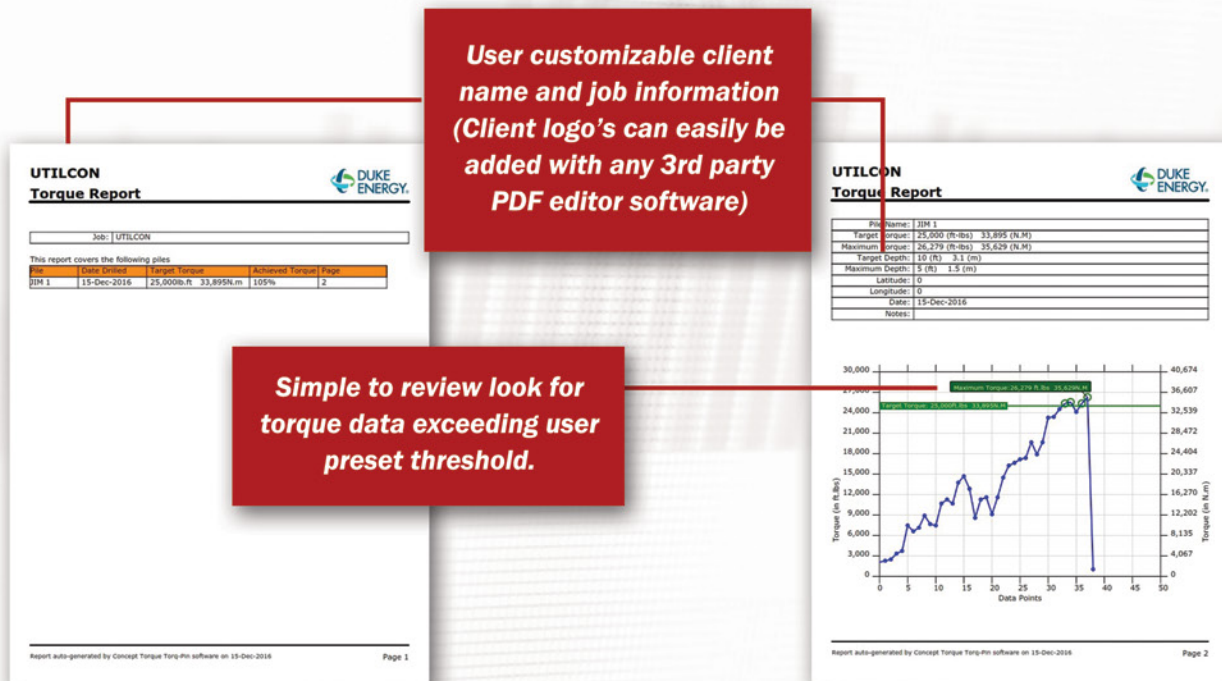
Available with 5-1/4" & 7-5/8" bolt circle flange types

Improved Reporting

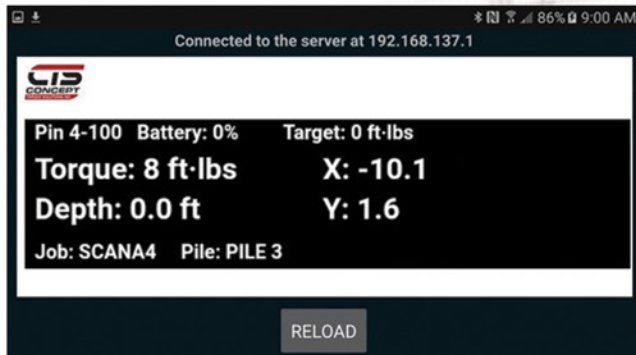


CTS is pleased to introduce our vastly improved reporting capabilities.

- Reports are exportable directly from the display, either via email using a smartphone with its' hotspot enabled, or through the onboard USB port connected to a flash drive.
- Reports are exported as both bare data (.dat file – open with Excel), and as a PDF line chart as shown below. One cover page for the job and a page for each individual pile is generated.
- Additionally, the PDF line chart will show depth as it is entered during the job. This will give the engineer a view of depth vs. torque on each pile. An optional hand held trigger is available which allows the operator (or his helper) to depress it when the pile/ anchor reaches a marked depth, allowing a more accurate (and more continuous) representation of torque vs. time"

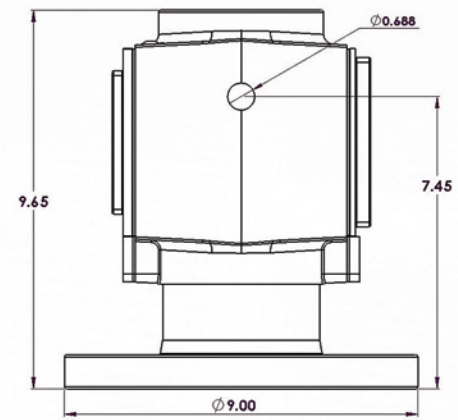
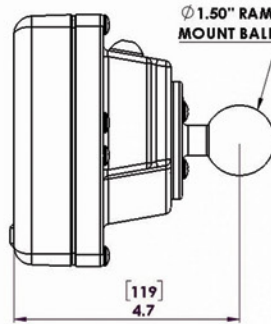
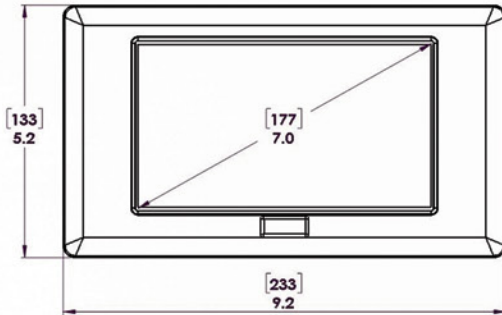


Smartphone Apps



CTS is now offering a free smartphone app for both iOS (Apple) and Android (Samsung, etc) users.

- Available for FREE download from either the Apple App Store or Google Play.
- Allows a user to remotely monitor torque and inclination data for piles/ anchors as they are installed via a WiFi connection between their smartphone and our display.



Rated Output (R.O.):	2 mV/V nominal
Nonlinearity:	0.1% of R.O.
Hysteresis:	0.1% of R.O.
Nonrepeatability:	0.05% of R.O.
Zero Balance:	1.0% of R.O.
Compensated Temp. Range:	60° to 160° F
Safe Temp. Range:	-65° to 200° F
Temp. Effect on Output:	0.005% of Load/° F
Temp. Effect on Zero:	0.005% of R.O./° F
Terminal Resistance:	350 ohms nominal
Excitation Voltage:	5 VDC
Safe Overload:	150% of R.O.

2", 2-1/2" & 2-5/8" Torq Hubs are offered Double-drilled to accommodate either the 5-1/4" or 7-5/8" bolt circle on the same hub. Torque ratings remain limited by bolt capacity (10,000 or 15,000 FT/LB). 3" are offered with the larger 7-5/8" pattern only.

FLANGE BOLT CIRCLE DIA.	HEX SHAFT SIZE	PART NUMBER	TORQUE RATING (MAX.)
5-1/4" & 7-5/8"	2"	TQHB-2	10,000 ft-lb (5-1/4" BC) 20,000 ft-lb (7-5/8" BC)
5-1/4" & 7-5/8"	2-1/2"	TQHB-212	10,000 ft-lb (5-1/4" BC) 20,000 ft-lb (7-5/8" BC)
5-1/4" & 7-5/8"	2-5/8"	TQHB-258	10,000 ft-lb (5-1/4" BC) 20,000 ft-lb (7-5/8" BC)
7-5/8"	3"	TQHB-3	20,000 ft-lb (7-5/8" BC)

Larger TORQ-HUB's available upon request



CONCEPT
TORQUE SOLUTIONS INC.

Ph: 403.340.3466

Fax: 403.340.3456

Email: info@concepttorque.com

Web: www.concepttorque.com

#540, 7700 - 76th Street Close, Red Deer, AB T4P 4G6