

Canada Tech Quartz (CTQ) II

Canada Tech has improved our Canada Tech Quartz (CTQ) II Tool to provide you with the same highly accurate pressure and temperature data in a new housing.

The integration of a QuartzDyne® hybrid digital transducer with our industry leading electronics has transpired into an extremely durable 3.6 Volt Quartz tool. The CTQ II utilizes a 2CC Cell Lithium Battery resulting in increased battery efficiency.

Designed to withstand the harshest downhole environments. The CTQ II is low in maintenance and is cost effective because of its advanced construction and smaller size.

The Canada Tech Quartz II delivers data with accuracy, resolution and long term stability that is unmatched by competitors.

The 200°C version offers a disposable electronic controller module.



Features
30.5" in length
Low Maintenance
3.6 Volt Electronics
0.02% Full Scale Accuracy Level
Low Cost

Applications
Interference Testing
Production Testing
Well Testing
Well Stimulations

Accessories	Part No.	
Shipping case assembly	101980	
Redress Kit	100208	
Interface	USB Int. Box	101821
	USB Int. Cable	101059
	Serial Int. Box**	101848
	Serial Int. Cable**	102139
	Serial Int. Power Supply**	102141
Battery	Battery Tester	102142
	2CC Cell Lithium	Varies depending on temperature rating

** only to be use with 150°C electronics

Please note that specifications and drawings are subject to change without notification

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 Canada

Canada Tech Quartz (CTQ) II

General Specifications	
Approximate Length	30.5"
Diameter	1 ¼"
Thread	3/4 - 16 UNF
Circuit	Hybrid
Housing Material	Inconel 718
Diaphragm Material	Inconel Bellows
O-Rings	Viton 90 Durometer, Aflas or Chemraz

Data Acquisition Specifications	
Memory Capacity	500,000 records
Record Contents	Time / Pressure / Temperature
Sample Interval	1 second - 1 hour
Program Segments	15
Communications	Standard PC USB or RS 232 Port
Software	Windows compatible

Pressure Specifications			
Sensor	Thickness Shear Mode Quartz Resonator		
Standard Ranges ¹	0 - 10,000 psi	0 - 16,000 psi	0 - 20,000 psi
Available Calibration Temp. Ranges	25°C - 150°C	25°C - 150°C, 177°C, 200°C	25°C - 150°C, 177°C, 200°C
Accuracy ² (% FS)	0.015	0.02	0.02
Typical Accuracy (% FS)	0.012	0.015	0.015
Achievable Resolution ³ (psi/sec)	< 0.006	< 0.008	< 0.008
Repeatability (% FS)	< 0.01	< 0.01	< 0.01
Nominal Sensitivity (Hz/psi)	2.8	2.5	2.5
Drift at 14 psi and 25°C (% FS/year)	Negligible	Negligible	Negligible
Drift at Max. Pressure & Temperature (% FS/year)	0.02	0.02	0.02

Temperature Specifications		
Standard Ranges	25°C - 150°C	25°C - 177°C, 200°C
Accuracy ² (°C)	0.5	0.5
Typical Accuracy (°C)	0.15	0.15
Achievable Resolution ³ (°C/sec)	< 0.005	< 0.005
Repeatability (°C)	< 0.01	< 0.01
Average Sensitivity (Hz/°C)	180	180
Frequency Output Range (kHz)	10 - 70	10 - 70
Drift at 177°C (°C/year)	< 0.1	< 0.1

Power Specifications	
Source	2CC Cell Lithium Battery
Voltage	3.6 VDC
Current	2.8 µAh per sample
Battery Life	Temperature Dependent

¹ Units calibrated with bellows meet performance specifications from 200 psi to full scale. Operating range is from 0 to FS.

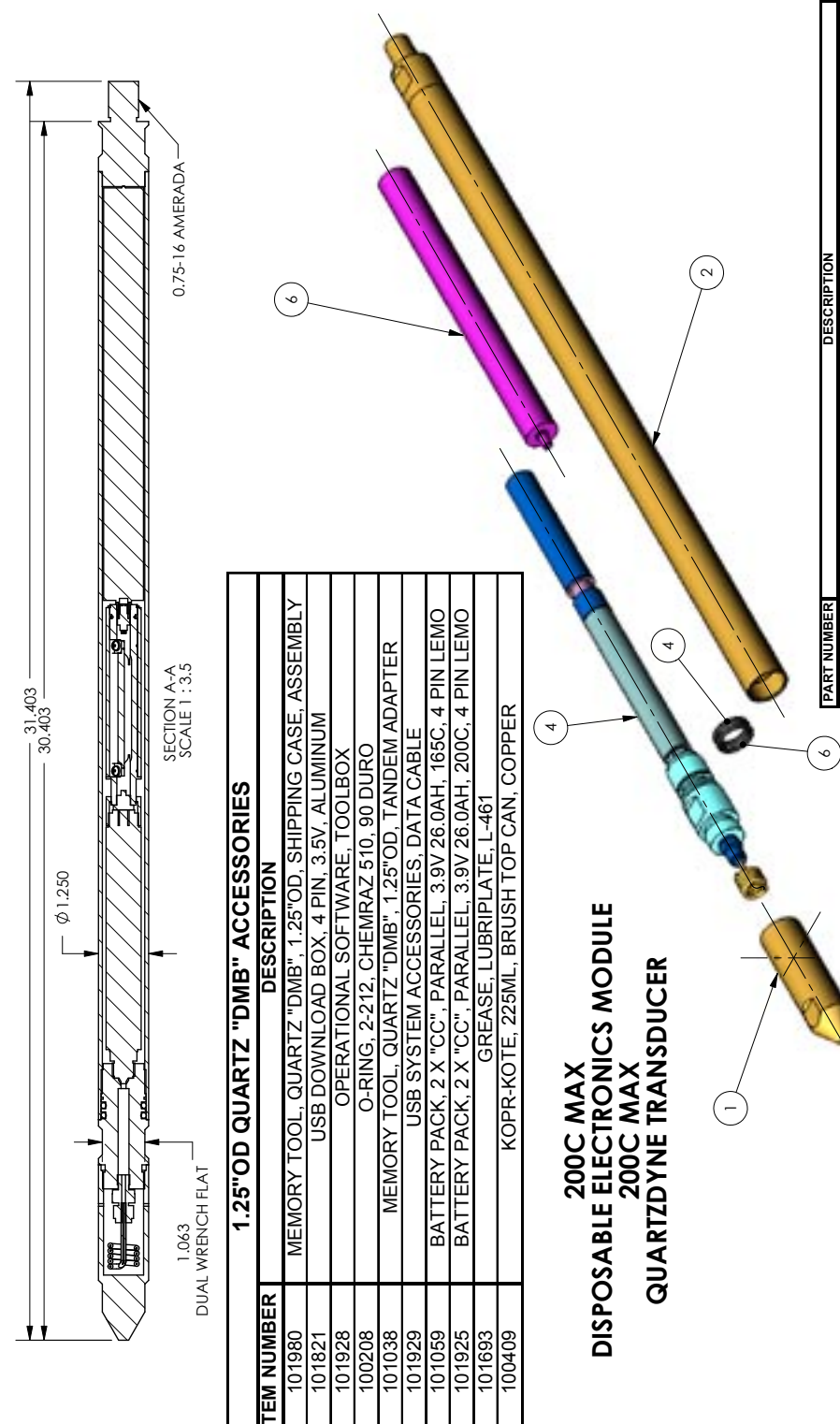
² Accuracy is the combined effects of repeatability, hysteresis, and corrected linearity over the calibrated temperature range

³ Achievable Resolution assumes a 7.2 MHz reference is used as the clock in a period-based counter

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Canada Tech Quartz (CTQ) II



31.403
30.403
0.75-16 AMERADA
SECTION A-A
SCALE 1 : 3.5
1.063
DUAL WRENCH FLAT
Ø 1.250

ITEM NUMBER	DESCRIPTION
101980	MEMORY TOOL, QUARTZ "DMB", 1.25"OD, SHIPPING CASE, ASSEMBLY
101821	USB DOWNLOAD BOX, 4 PIN, 3.5V, ALUMINUM
101928	OPERATIONAL SOFTWARE, TOOLBOX
100208	O-RING, 2-212, CHEMRAZ 510, 90 DURO
101038	MEMORY TOOL, QUARTZ "DMB", 1.25"OD, TANDEM ADAPTER
101929	USB SYSTEM ACCESSORIES, DATA CABLE
101059	BATTERY PACK, 2 X "CC", PARALLEL, 3.9V 26.0AH, 165C, 4 PIN LEMO
101925	BATTERY PACK, 2 X "CC", PARALLEL, 3.9V 26.0AH, 200C, 4 PIN LEMO
101693	GREASE, LUBRIPATE, L-461
100409	KOPR-KOTE, 225ML, BRUSH TOP CAN, COPPER

**200C MAX
DISPOSABLE ELECTRONICS MODULE
200C MAX
QUARTZDYNE TRANSDUCER**

PART NUMBER	DESCRIPTION
101862	MEMORY TOOL, QUARTZ "DMB", 1.25"OD, ASSEMBLY, 163, 200°C, INCONEL 718
101863	MEMORY TOOL, QUARTZ "DMB", 1.25"OD, ASSEMBLY, 203, 200°C, INCONEL 718

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	101037	MEMORY TOOL, QUARTZ "DMB", 1.25"OD, BULLNOSE	1
2	100273	MEMORY TOOL, QUARTZ "DMB", 1.25"OD, BATTERY BARREL, 2 "CC", INCONEL 718 O-RING, 2-212, AFLAS, 80 DURO	1
3	100687	O-RING, 2-212, AFLAS, 80 DURO	1
4	101860	MEMORY TOOL, QUARTZ "DMB", 1.25"OD, ASSEMBLY FOR CALIBRATION, INCONEL 718	1
5	100208	O-RING, 2-212, CHEMRAZ 510, 90 DURO	1
6	101925	BATTERY PACK, 2 X "CC", PARALLEL, 3.9V 26.0AH, 200C, 4 PIN LEMO	1

NAME	DATE
markh	05/12/07
markh	05/12/07

NOT TO SCALE SHEET 1 OF 1

SEE ABOVE TABLE 101862

REVISIONS

101862

MEMORY TOOL, QUARTZ "DMB", 1.25"OD, INCONEL 718

\\Engineering\usd\kworks\New\Parts and Drawings 101000 to 101999\101862

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