

AUDITOR™ TORQUE CUBE™

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The "Cube" is a great entry level tester that packs many features into a small portable package. Versatile mounting design makes testing of pistol or inline tools simple. Belleville washer joint kits allow for easy configuration of hard, medium, or soft joint rates.

FEATURES AND BENEFITS

- Simple, easy to use, portable tester.
- Intuitive Auditor™ Series menu structure for quick start up.
- Bidirectional accuracy of $\pm 1\%$ of indicated reading within top 90% of full scale.
- Eight (8) available engineering units: oz-in, lbf-in, lbf-ft, Nm, Ncm, kgf-cm, gf-cm, kgf-m.
- Three modes of operation: Track, Peak and 1st Peak.
- Selectable power tool filtering: 125Hz, 250Hz, 500Hz, 1000Hz and 1500Hz.
- Serial output.
- NiMh rechargeable batteries provide a minimum of 8-10 hours of continuous use.
- For testing of power tools, click, dial and digital wrenches.
- Data storage 999 readings.



ATC-500

SPECIFICATIONS

MODEL*	RECOMMENDED TORQUE RANGE		WEIGHT		W X H X D	W X H X D
	IN-LB	NM	LB	KG	MM	IN
ATC-25	2.5 - 25	.28 - 2.8	2.5	1.13	79 x 95 x 83	3.13 x 3.75 x 3.25
ATC-100	10.0 - 100	1.3 - 11.3	2.5	1.13	79 x 95 x 83	3.13 x 3.75 x 3.25
ATC-250	25.0 - 250	2.8 - 28.25	2.5	1.13	79 x 95 x 83	3.13 x 3.75 x 3.25
ATC-500	50.0 - 500	5.6 - 56.5	2.5	1.13	79 x 95 x 83	3.13 x 3.75 x 3.25

*Models with higher torque ranges are available on request.

OPTIONAL ACCESSORY RS232C - Cable to Serial (DSUB9) Connect your "CUBE" to a serial printer or PC.

JOINT KITS



MODEL	DESCRIPTION	RECOMMENDED TORQUE RANGE	
		IN-LB	NM
RDI-25(HD)	Rundown Fixture	2.5 - 25	.28 - 2.8
RDI-100(HD)	Rundown Fixture	10.0 - 100	1.3 - 11.3
RDI-250(HD)	Rundown Fixture	25.0 - 250	2.8 - 28.25
RDI-500(HD)	Rundown Fixture	50.0 - 500	5.6 - 56.5

Add "HD" to part numbers for wear resistant models.

AUDITOR™ DESKTOP TESTERS

AUDITOR™ SERIES UET TORQUE TESTERS/COLLECTORS

Quickly, easily and precisely check the torque on your tools with Auditor™ AUET and AUET/MTM torque testers from AIMCO. The Auditor™ Series enables you to adjust your tool on hard, medium or soft joint rates. Auditor™ testers are available in single (AUET) or dual (AUET/MTM) transducer styles to provide flexibility and true value for your testing budget.

Using torque measurement equipment before assembly is typically used for tool setup and tool capability studies. For tool setup, the tool crib will want to set the tool close to the torque required by the application. For tool capability studies, one can ensure that the tool can provide the necessary torque with required repeatability.



FEATURES AND BENEFITS

- Verify torque settings and repeatability of hand tools, power tools, and pulse tools. Adjustable auto clear feature.
- Provides data output to computers or serial printers via serial communication.
- Uses AC power or NiMh batteries.
- Multiple transducer models available with any combination of two standard transducers from 100 in-oz to 1000 in-lbs*.
- MTM models supplied with external transducer port.
- Push-button zero to quickly reset instrument reading.
- Four modes of processing torque signals:
 1. **Peak:** Records & displays highest torque peak.
 2. **First Peak:** Records & displays first torque peak.
 3. **Track:** Displays all torsional strain applied to transducer in real time (no memory).
 4. **Pulse:** Records accurate peak value achieved by hydraulic pulse tools.
- Repeatability joint simulator included.
- Selectable engineering units with eight (8) available scales.
- Selectable frequency response provides filtering for

SINGLE TRANSDUCER MODELS

MODEL**	RECOMMENDED TORQUE RANGE			
AUET-0100(-DC)	10 - 100	in-oz	0.7 - 7.2	kgf-cm
AUET-10(-DC)	1 - 10	in-lb	1.1 - 11.5	kgf-cm
AUET-50(-DC)	5 - 50	in-lb	0.5 - 5.6	Nm
AUET-100(-DC)	10 - 100	in-lb	1.1 - 11.3	Nm
AUET-250(-DC)	25 - 250	in-lb	2.8 - 28.3	Nm
AUET-1000(-DC)	100 - 1000	in-lb	11.3 - 113	Nm
AUET-1200(-DC)	120 - 1200	in-lb	13.6 - 135.6	Nm

DUAL TRANSDUCER MODELS

MODEL**	RECOMMENDED TORQUE RANGE			
	Transducer 1	Transducer 2	Transducer 1	Transducer 2
AUET/MTM-10-100(-DC)	1.0 - 10 in-lb	10 - 100 in-lb	0.11 - 1.12 Nm	1.3 - 11.3 Nm
AUET/MTM-50-250(-DC)	5.0 - 50 in-lb	25 - 250 in-lb	0.56 - 5.65 Nm	2.8 - 28.3 Nm
AUET/MTM-50-500(-DC)	5.0 - 50 in-lb	50 - 500 in-lb	0.56 - 5.65 Nm	5.65 - 56.49 Nm
AUET/MTM-100-500(-DC)	10 - 100 in-lb	50 - 500 in-lb	1.13 - 11.3 Nm	5.65 - 56.49 Nm
AUET/MTM-100-1000(-DC)	10 - 100 in-lb	100 - 1000 in-lb	1.13 - 11.3 Nm	11.3 - 113 Nm

*Custom sizes are also available, please inquire.

**Add "-DC" to part numbers for data collecting models.

Data collecting models allow multiple files/tools/applications to be associated with torque data. Requires Tool Manager or Audit Manager software.

JOINT KITS



MODEL	DESCRIPTION	RECOMMENDED TORQUE RANGE	
		IN-LB	NM
RDI-25(HD)	Rundown Fixture	2.5 - 25	.28 - 2.8
RDI-100(HD)	Rundown Fixture	10.0 - 100	1.3 - 11.3
RDI-250(HD)	Rundown Fixture	25.0 - 250	2.8 - 28.25
RDI-500(HD)	Rundown Fixture	50.0 - 500	5.6 - 56.5

Add "HD" to part numbers for wear resistant models.

*Standard stock items include 1 joint kit / transducer. Transducers above 1000 in-lb are quoted upon request. Max capacity internal transducer is 250 ft-lb.

AUDITOR™ TORQUE DATA ANALYZERS/DISPLAY

AUDITOR™ TORQUE DATA ANALYZERS/DATA COLLECTORS

- Light weight and portable for production line auditing.
- 16 hour continuous use battery life.
- Monitors torque, angle & pulse count.
- Track, Peak, First Peak and Pulse modes for use with all types of assembly tools.
- Programmable frequency response.
- Memory storage of 999 data points.
- Visible indication of OK or NOT OK rundowns.
- Display of X-bar, Sigma, Cp & Cpk statistical values.
- Serial data output.
- IS style transducer compatibility through interface cable.
- Statistics Display.
- Data collecting models allow multiple files/tools/applications to be associated with torque data. Requires Tool Manager or Audit Manager software.



ATDA-S



MULTI-CHANNEL TORQUE DISPLAY

The Multi-Channel Torque Display is designed for the simultaneous measurement of torque spindles. Each transducer has a dedicated torque processor built into the display. These channels are then fed into a master controller which then displays and stores the readings into memory.

- Transducer inputs: Eight (8) maximum
Note: Unused channels will display as either not connected or zero. They have no effect on the utilized channels.
- Accuracy: Dependant on the transducer installed, 1% of Full Scale with ARTIS series rotary transducer; Top 90% of Full Scale 1% of Indicated with UET Series Static Transducers, Top 90% of full scale.
- Display Resolution: Four (4) Active digits.
- Engineering Units: Eight (8) Engineering Units as Standard: Oz. In., Lb. In., Lb. Ft., Nm, cNm, KgfCm, gfCm, Kgfm. Force, pressure, voltage and displacement are available as an option.
- Modes: Peak, 1st Peak and Track
- Memory Storage: Eight (8) Channels, 999 sets of Readings Maximum.
- Serial Communication Standard



AMCTS

MODEL	DESCRIPTION
ATDA	Auditor Torque Data Analyzer
ATDA-DC	Auditor Torque Data Collector
ATDA-S	Auditor Torque Data Streaming Unit
AMCTS	Auditor Multi Channel Torque Display

AUDITOR™ ROTARY TRANSDUCERS

ROTARY TRANSDUCERS – FOR DYNAMIC OR RESIDUAL TESTING

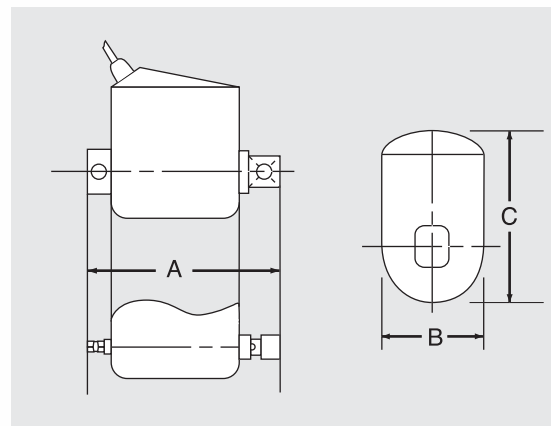
- No “brush bounce” when used with pulse tools, stall tools, right angle nutrunners, screwdrivers, multiples, and DC powered tools.
- Torque or torque/angle models available in sizes from 2 to 5000 Nm (15 in-lb to 3690 ft-lb).
- Small compact design, that allows use in limited access areas.
- Rugged aluminum alloy housing.



Auditor™ Rotary Transducers

TWO STYLES AVAILABLE SMART & IS

- Smart style incorporates a “smart chip” for plug-n-play operation with Auditor™ Analyzer.
- IS (Industry Standard) style is designed to work with other brands of torque analyzers or data collectors. Includes a military type connector with a torque signal of 2 mv/v excitation.



DRIVE	MAX TORQUE		SMART PART NUMBER	IS PART NUMBER	TORQUE ANGLE*	LENGTH (A)	THICKNESS (B)	WIDTH (C)	WEIGHT lb
1/4 Hex	2 Nm	18 in-lb	ARTU-25H-2T	ARTIS-25H-2T	A	4.6	1.1	2.2	1.0
1/4 Hex	5 Nm	44 in-lb	ARTU-25H-5T	ARTIS-25H-5T	A	4.6	1.1	2.2	1.0
1/4 Hex	10 Nm	88 in-lb	ARTU-25H-10T		A	4.6	1.1	2.2	1.0
1/4 Hex	20 Nm	180 in-lb	ARTU-25H-20T	ARTIS-25H-20T	A	4.6	1.1	2.2	1.0
1/4 Sq.	10 Nm	88 in-lb	ARTU-25S-10T	ARTIS-25S-10T	A	2.9	1.1	2.2	1.0
1/4 Sq.	20 Nm	180 in-lb	ARTU-25S-20T		A	2.9	1.1	2.2	1.0
3/8 Sq.	25 Nm	225 in-lb	ARTU-38S-25T		A	3.0	1.1	2.4	1.2
3/8 Sq.	75 Nm	50 ft-lb	ARTU-38S-75T	ARTIS-38S-75T	A	3.0	1.6	2.7	1.2
1/2 Sq.	180 Nm	130 ft-lb	ARTU-50S-180T	ARTIS-50S-180T	A	3.4	1.6	2.7	1.5
3/4 Sq.	250 Nm	180 ft-lb	ARTU-75S-250T		A	4.1	2.0	3.1	2.2
3/4 Sq.	500 Nm	370 ft-lb	ARTU-75S-500T	ARTIS-75S-500T	A	4.1	2.0	3.1	2.2
1 Sq.	750 Nm	550 ft-lb	ARTU-100S-750T		A	4.9	2.4	3.6	4.0
1 Sq.	1400 Nm	1025 ft-lb	ARTU-100S-1400T	ARTIS-100S-1400T	A	4.9	2.4	3.6	4.0

*Add this suffix to the end of the part number to indicate torque or torque/angle transducers

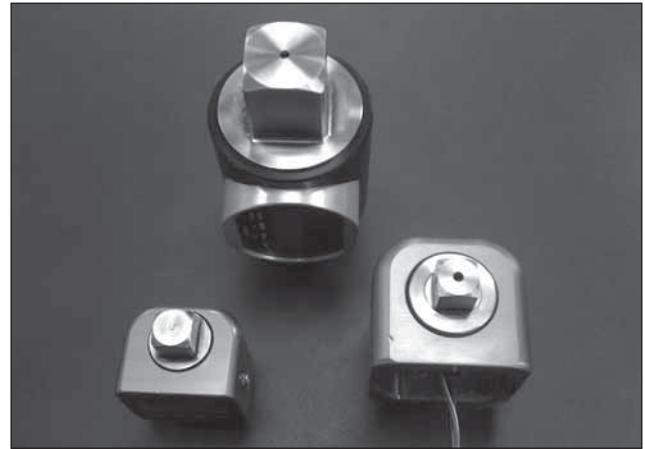
AUDITOR™ STATIONARY TRANSDUCERS

STATIONARY TRANSDUCERS – FOR TORQUE TESTING AND CALIBRATION

- Industrial transducers used in tool crib and production applications for hand & power tools.
- Precision female square drives to facilitate testing.
- Available in 1/4" to 1" square drive.
- Heavy-duty stainless steel allows 140% overload capacity.
- Metrology transducers used as master transducers in metrology labs only (Contact AIMCO Customer Service for more information).

TWO STYLES AVAILABLE SMART & IS

- **Smart style** incorporates a "smart chip" for plug-n-play operation with Auditor Analyzer.
- **IS (Industry Standard) style** is designed to work with other brands of torque analyzers or data collectors. Includes a military type connector with a torque signal of 2 mv/v excitation.



Stationary Transducers (Joint kits purchased separately)

ROTARY AND STATIONARY TRANSDUCERS

ALL MODELS

Accuracy: Better than $\pm 1\%$ of FSD
Zero Drift: Less than $\pm 0.1\%$ of FSD per degree Celsius
Coil Cable: 1 meter strain relieved cable on Smart models only

ROTARY MODELS

Overload Capacity: 125% FSD
Drag Friction: Less than 1% rated torque or 0.1 Nm

STATIONARY MODELS

Accuracy: Metrology models better than $\pm 0.25\%$ IR
Overload Capacity: 140% FSD
Mounting: 4 Holes of 8.3 mm diameter on 80 mm circle diameter

DRIVE SIZE (A)	MAX TORQUE		SMART PART NUMBER	IS PART NUMBER
1/4"	5.6 Nm	50 in-lb	ASTU-25D-6	
1/4	11 Nm	100 in-lb	ASTU-25D-11	ASTIS-25D-11
1/4	28 Nm	250 in-lb	ASTU-25D-28	ASTIS-25D-28
3/8	67 Nm	50 ft-lb	ASTU-38D-67	
3/8	135 Nm	100 ft-lb	ASTU-38D-135	ASTIS-38D-135
1/2	270 Nm	200 ft-lb	ASTU-50D-270	ASTIS-50D-270
3/4	540 Nm	400 ft-lb	ASTU-75D-540	
3/4	1017 Nm	750 ft-lb	ASTU-75D-1000	ASTIS-75D-1000
1	1695 Nm	750 ft-lb	ASTU-100D-1700	ASTIS-100D-1700

JOINT KITS

DRIVE SIZE - IN	ROTARY KIT PART NUMBER	STATIONARY KIT PART NUMBER
1/4	AJKR-28	AJKS-25D
3/8	AJKR-135	AJKS-38D
1/2	AJKR-271	AJKS-50D
3/4	AJKR-1017	AJKS-75D
1	AJKR-1695	AJKS-100D

TORQUE MEASUREMENT ACCESSORIES

TORQUE MEASUREMENT SYSTEM CABLES

Cable part number	AUET	AUET-MTM	ATDA	ADW	ADW-DC	ATC	AUET-MTM / ATDA to IS transducer T/A 10S	AUET-MTM / ATDA to IS transducer 4S	AUET-MTM / ATDA Intelligent chip in cable Specific range 4S	AUET-MTM / ATDA Intelligent chip in cable Specific range T/A 10S	AUET-MTM / ATDA to ATWIS 6 Pin	ATSTA to IS T/A 10S	ATSTA to IS 4S	ATSTA to IS 10S T/A coiled
RS232C	X	X	X	X	X	X								
ATDBLIS							X							
ATDBRIS								X						
ICBL-4P									X					
ICBL-10P										X				
ICBL-5000DIG											X			
746-2000												X		
746-1500													X	
787-2000														X

There are many more options as there are many more torque devices that can be connected to torque instruments.

As you have opportunities to connect transducers to our instruments it is imperative that we have the specifications on the transducers; connectors, pins, pin outs, voltage to signal ratio etceteras. If we can get this information we can most likely build a cable to connect to our instruments.

When connecting transducers to Auditor products – AUET-MTM and ATDA there are three choices;

- A standard cable ATDBRIS or ATDBLIS for torque or torque/angle transducers. The transducers will have to be “setup” in the instrument when used.
- An intelligent cable ICBL4P or ICBL10P which has a chip installed that makes the cable specific to a torque range. Any transducer connected to these cables will be “introduced” to the torque instrument with the specific torque range that the cable has been manufactured to, i.e. 75 Nm, 180 Nm, 500 Nm, 750Nm etceteras. Almost “plug-n-play”.
- Adding an intelligent chip to the transducer, this converts the transducer from the OEM intelligent transducer to an Auditor Intelligent transducer, or converts an IS transducer into an intelligent transducer.