

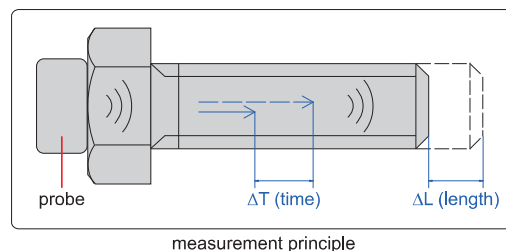
# ELECTROMAGNETIC ULTRASONIC BOLT AXIAL FORCE TESTER

## CODE UFT-Q100

PROBE CAN BE CUSTOMIZED ACCORDING TO SPECIAL BOLT SPECIFICATION

PROBE CAN BE CUSTOMIZED ACCORDING TO WORKING TEMPERATURE

DATA OUTPUT



- Primarily applied in wind power, oil and petrochemical, nuclear power, hydrogen energy, heavy industry, and other sectors
- Perform quality inspections, risk assessments, inspection-based maintenance, leak detection and etc. on flange bolts
- The dual-wave method measurement principle for transverse and longitudinal waves enables direct measurement of the absolute axial force of in-service bolts without requiring measurement of the bolt's initial length
- Unlike piezoelectric ultrasound, no grinding, no coupling, no patching, making operation simple and convenient
- Enter bolt specifications for quick measurement of bolt axial force
- Precise calibration for multiple identical bolts (sample calibration service available), automatically fitting calibration coefficients to accurately measure bolt axial force
- Temperature sensor (included) enables automatic temperature compensation
- Establish a calibration database for different bolt grades for immediate access
- Automatically save data and export data in Excel, radar charts and statistical bar charts



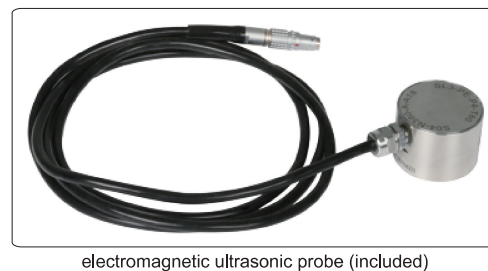
### MAIN UNIT SPECIFICATION

Measurement method	electromagnetic ultrasonic single-wave and dual-wave measurement methods
Applicable bolt range	M8~M42, length less than 6m
Applicable bolt surface	front end is flat, rear end can adapt to different types
Accuracy of axial force	±5% (when calibrated precisely)
Manual testing speed	4~10s/piece
Measurement mode	automatic/manual
Working temperature	ambient temperature
Communication method	built-in wireless Wi-Fi/wired ethernet
Storage capacity	120GB
Power supply	rechargeable lithium battery
Dimension (L×W×H)	125×65×200mm
Weight	1250g

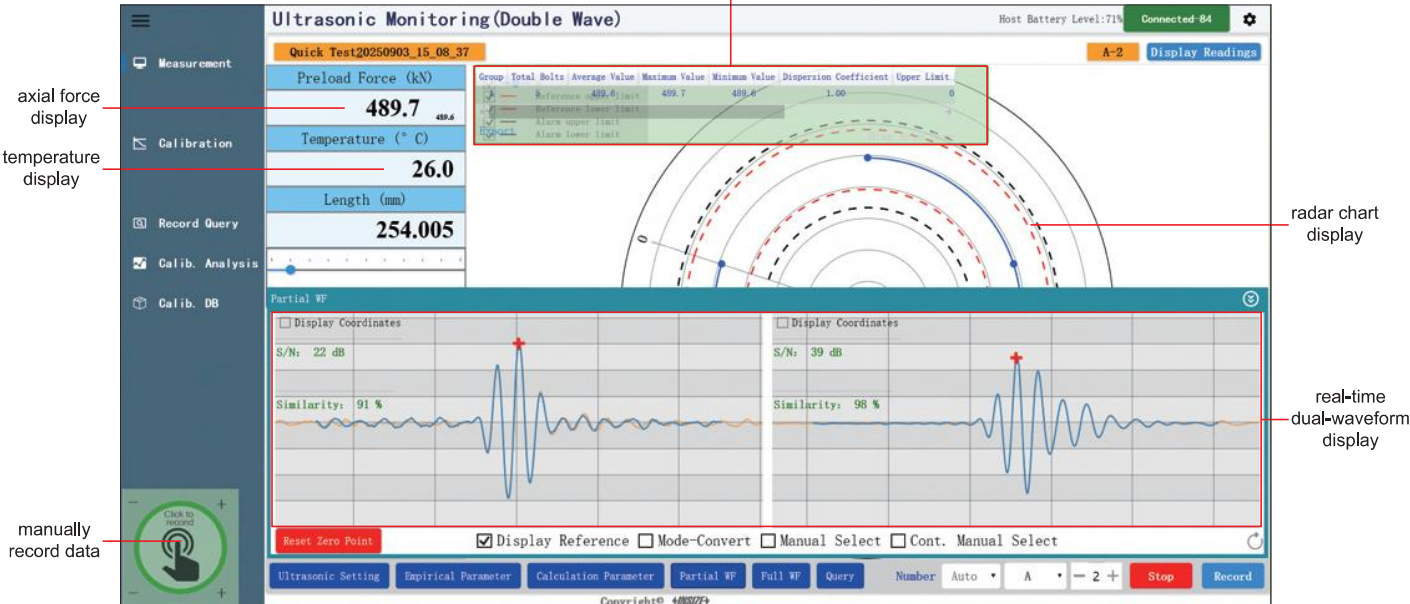


### PROBE (INCLUDED) SPECIFICATION

Code	UFT-Q100-P1	UFT-Q100-P2
Differentiation	different sensitivities to transverse and longitudinal waves	
Applicable situation	when longitudinal wave is weak	when transverse wave distortion is severe
Cable specification	Ø5mm×1.5m	
Dimension	37×37×27mm	
Weight	270g	



statistical analysis of measurement results



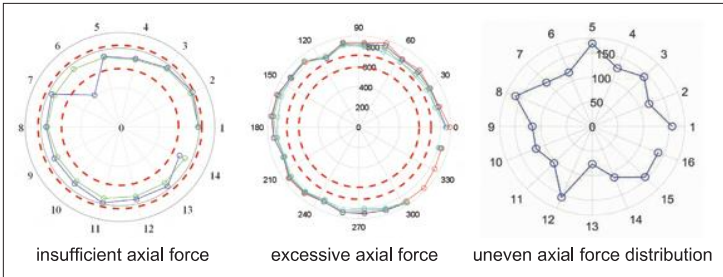
measuring software (included)



precise calibration by using hydraulic universal testing machine

Calibration Data											
Serial	Batch	Model	Material	Length	Area	Volume	Weight	Force	Stress	Strain	Modulus
101	101	101	101	101	101	101	101	101	101	101	101
102	102	102	102	102	102	102	102	102	102	102	102
103	103	103	103	103	103	103	103	103	103	103	103
104	104	104	104	104	104	104	104	104	104	104	104
105	105	105	105	105	105	105	105	105	105	105	105
106	106	106	106	106	106	106	106	106	106	106	106
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112	112	112	112	112	112	112	112	112	112	112	112
113	113	113	113	113	113	113	113	113	113	113	113
114	114	114	114	114	114	114	114	114	114	114	114
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116	116	116	116	116	116	116	116	116	116	116	116
117	117	117	117	117	117	117	117	117	117	117	117
118	118	118	118	118	118	118	118	118	118	118	118
119	119	119	119	119	119	119	119	119	119	119	119
120	120	120	120	120	120	120	120	120	120	120	120

simulation calibration by loading the database



STANDARD DELIVERY

Main unit	1 pc
Tablet computer	1 pc
Measuring software	1 set
Electromagnetic ultrasonic probe UFT-Q100-P1	1 pc
Electromagnetic ultrasonic probe UFT-Q100-P2	1 pc
Temperature compensation sensor	1 pc
Rechargeable lithium battery	2 pcs
Power adapter	1 pc

OPTIONAL ACCESSORY

Special bolt electromagnetic ultrasonic probe	customized according to test requirements
Hydraulic universal testing machine	UTM-H series