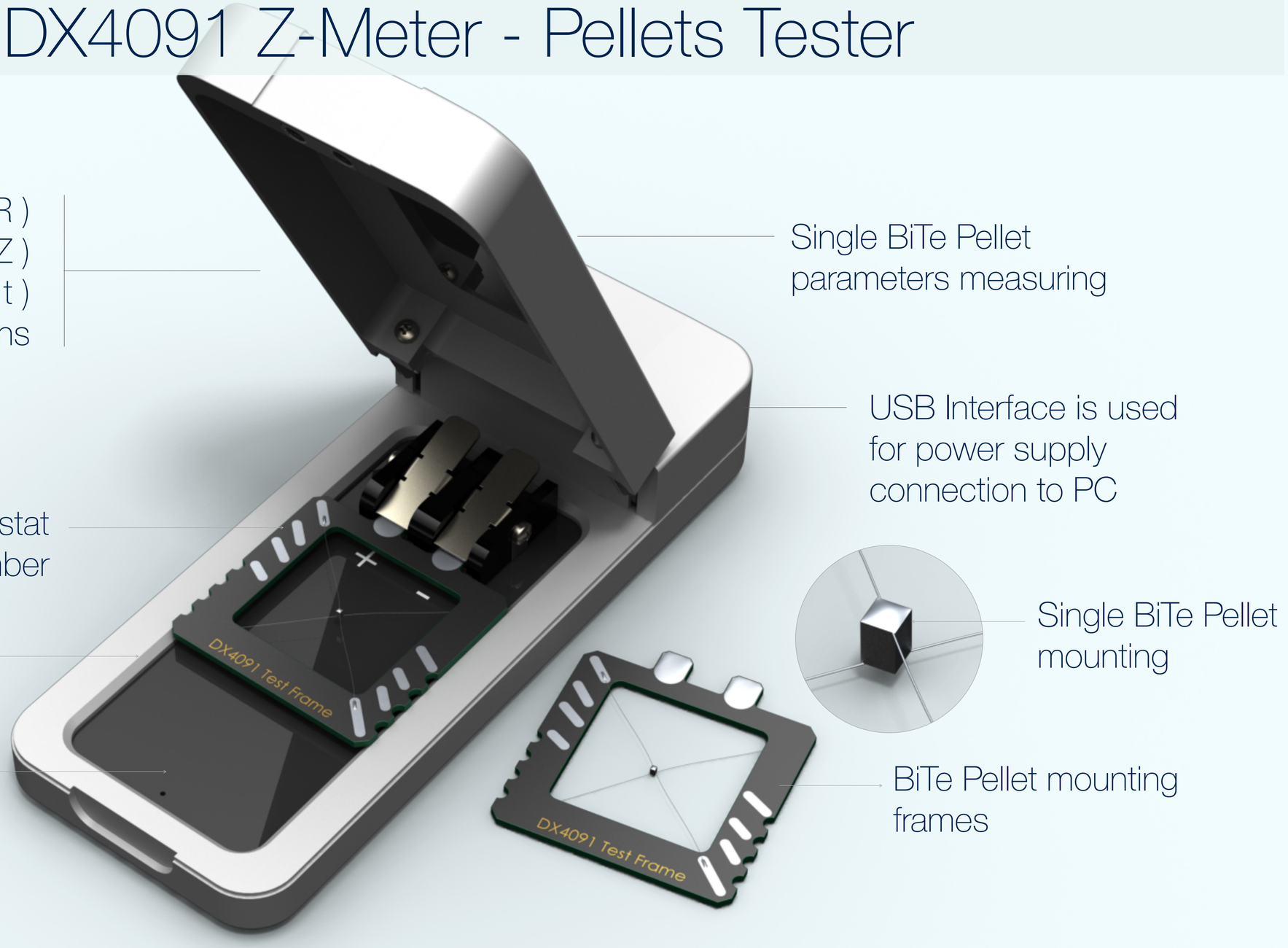
DX4091 Z-Meter - Pellets Tester



AC Resistance (ACR)
Figure-of-Merit (Z)
Time Constant (t)
dTmax estimations

Single BiTe Pellet
parameters measuring

USB Interface is used
for power supply
connection to PC

Passive Thermostat
Chamber

Single BiTe Pellet
mounting

Magnetic Lock Cover

Built-in Temperature
sensor

BiTe Pellet mounting
frames

50mm

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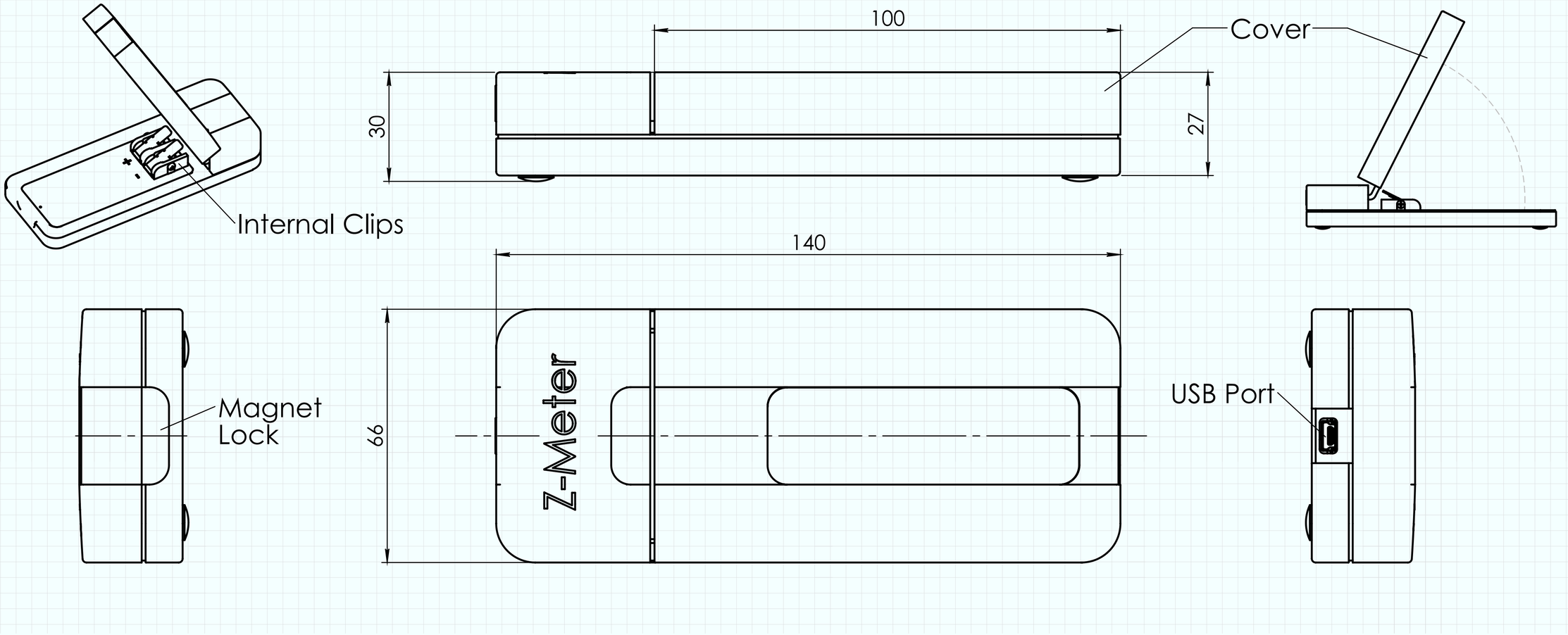
DX4091 Z-Meter

Dimensions (mm)



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DX4091 Z-Meter

Specifications

DX4091 Z-METER SPECIFICATIONS		
Connection to PC		Required
PC Connection Interface		USB type A
Z-Meter Software		Included. Windows version only
Measurement Interface		Internal in Chamber
Measurement Scheme		4-wires method
Ambient Temp. Sensor		Available, integrated
Pellet type N-P Check		Available
Typical Testing Time	sec	5 .. 10
SUPPORTED PELLETS DIMENSIONS		
Pellet Cross-section, S	mm^2	0.1 .. 10
Pellet Height, H	mm	0.5 .. 5
Pellet S / H		0.15 .. 10
PELLET RESISTANCE MEASUREMENTS (R)		
Range	mOhm	0.2 .. 200
Accuracy	%	0.6 (but >0.02mOhm)
Repeatability	%	0.3
PELLET FIGURE-OF-MERIT MEASUREMENTS (Z)		
Range	10E-3/K	1 .. 4
Accuracy	%	1.5
Repeatability	%	0.4

PELLET CONDUCTIVITY (σ)		
Range	$Ohm^{-1}cm^{-1}$	500 .. 2000
Accuracy	%	1.0
Repeatability	%	0.5
OPERATING CONDITIONS		
Ambient Temperature	°C	15 .. 35
Humidity	%	0 .. 95
DX4091 POWER SUPPLY		
External Power Adapter		NOT REQUIRED
Voltage	V	5.0 (from PC USB port)
Current	mA	250
DIMENSIONS AND WEIGHT		
Z-Meter DX4091	mm	120 x 66 x 30 (with cover closed)
Z-Meter Weight	g	240
STANDARD DX4091 KIT		
Z-Meter DX4091	1pcs	
Test Frame for Pellets	5pcs	Test frame for BiTe pellet mounting
Pt Wire	1m	50um Pt wire (coil)
Z-Meter Software		MS Windows version only
USB Cable		Type A -> USB Micro
OPTIONAL ACCESSORIES (TO ORDER SEPARATELY)		
Additional Pellets Frame		Can be provided by request
Additional Pt Wires		Can be provided by request

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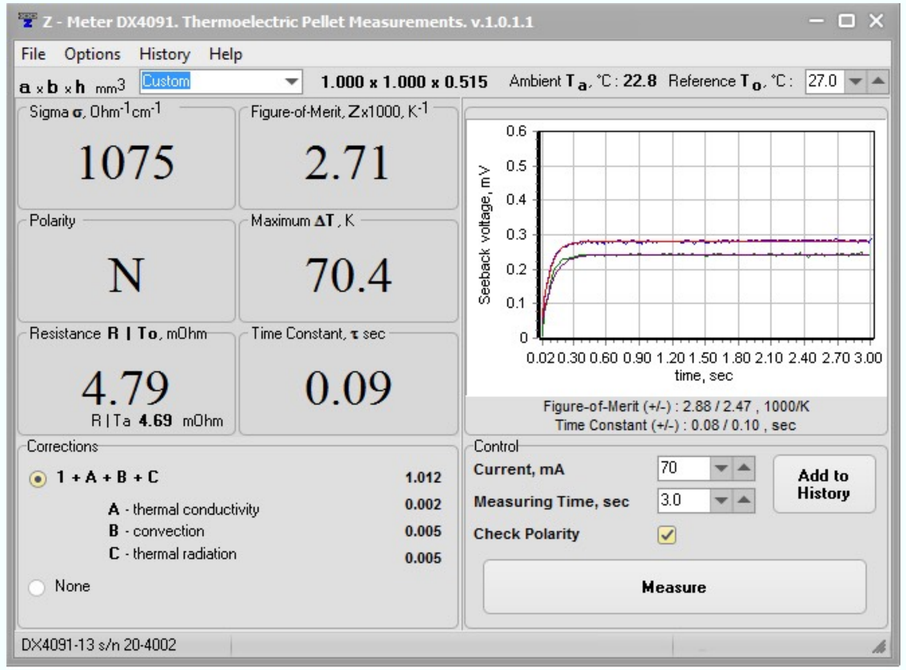
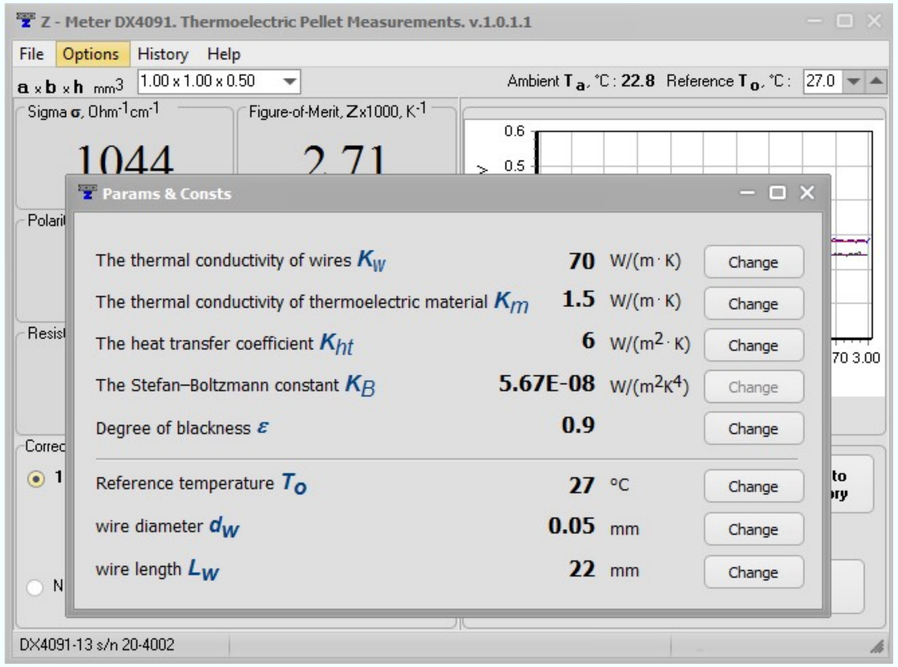
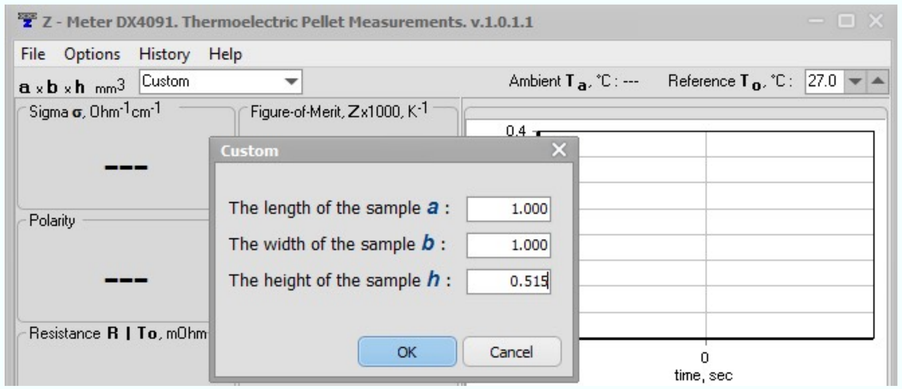
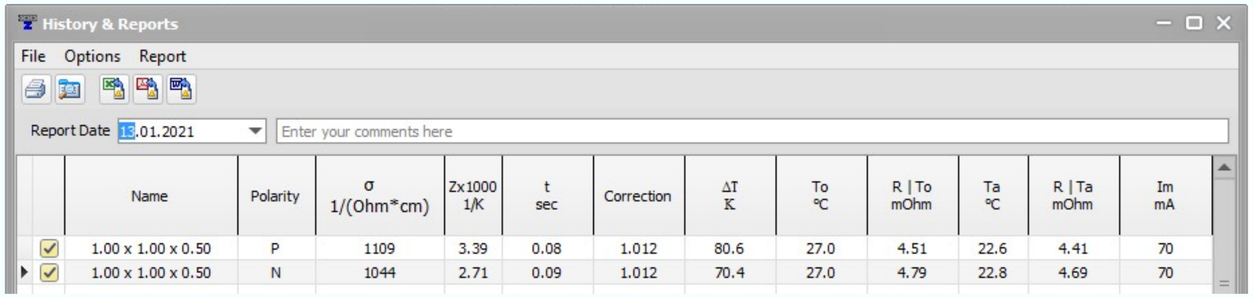
DX4091 Z-Meter Pellets Tester Software









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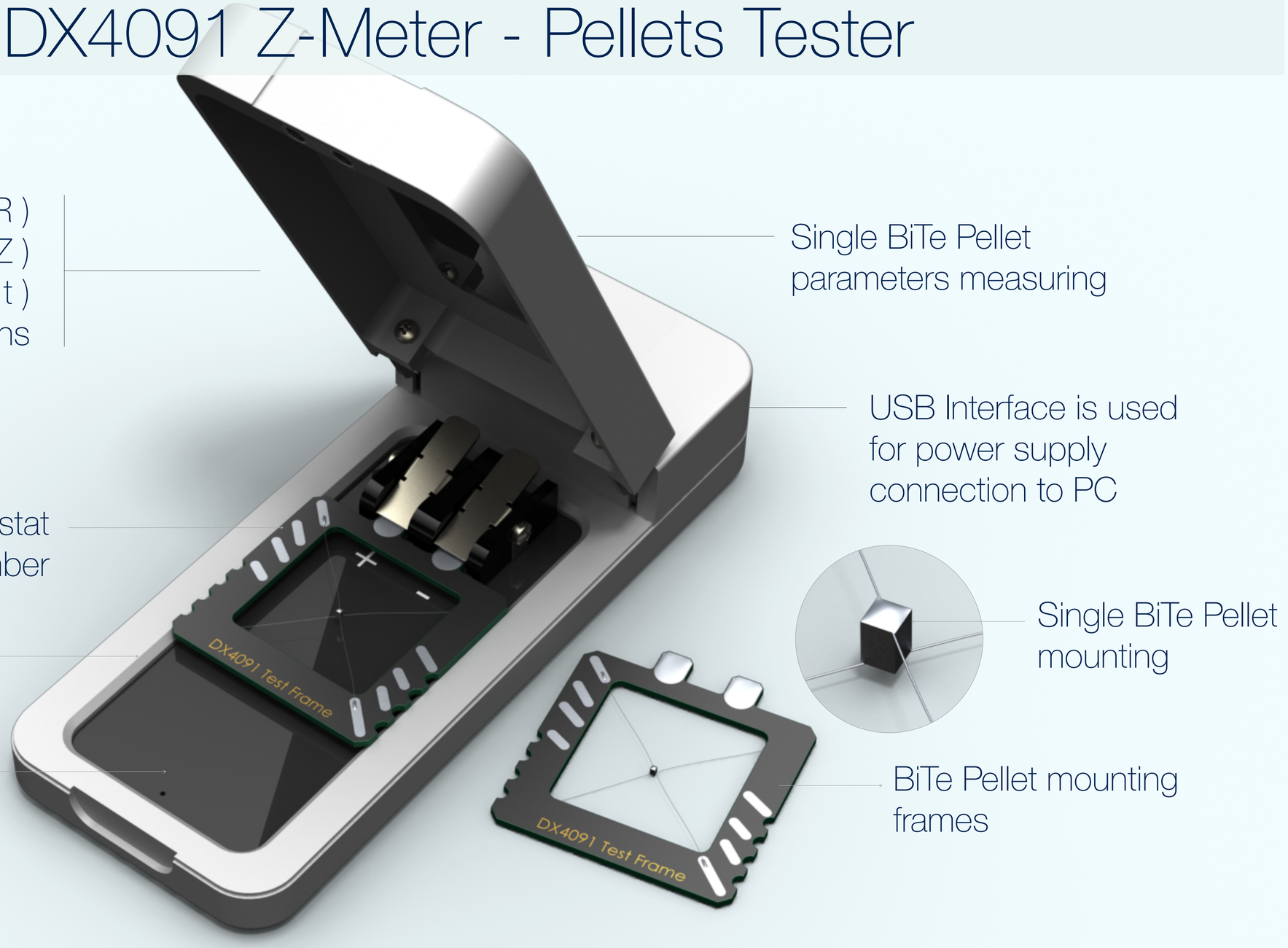

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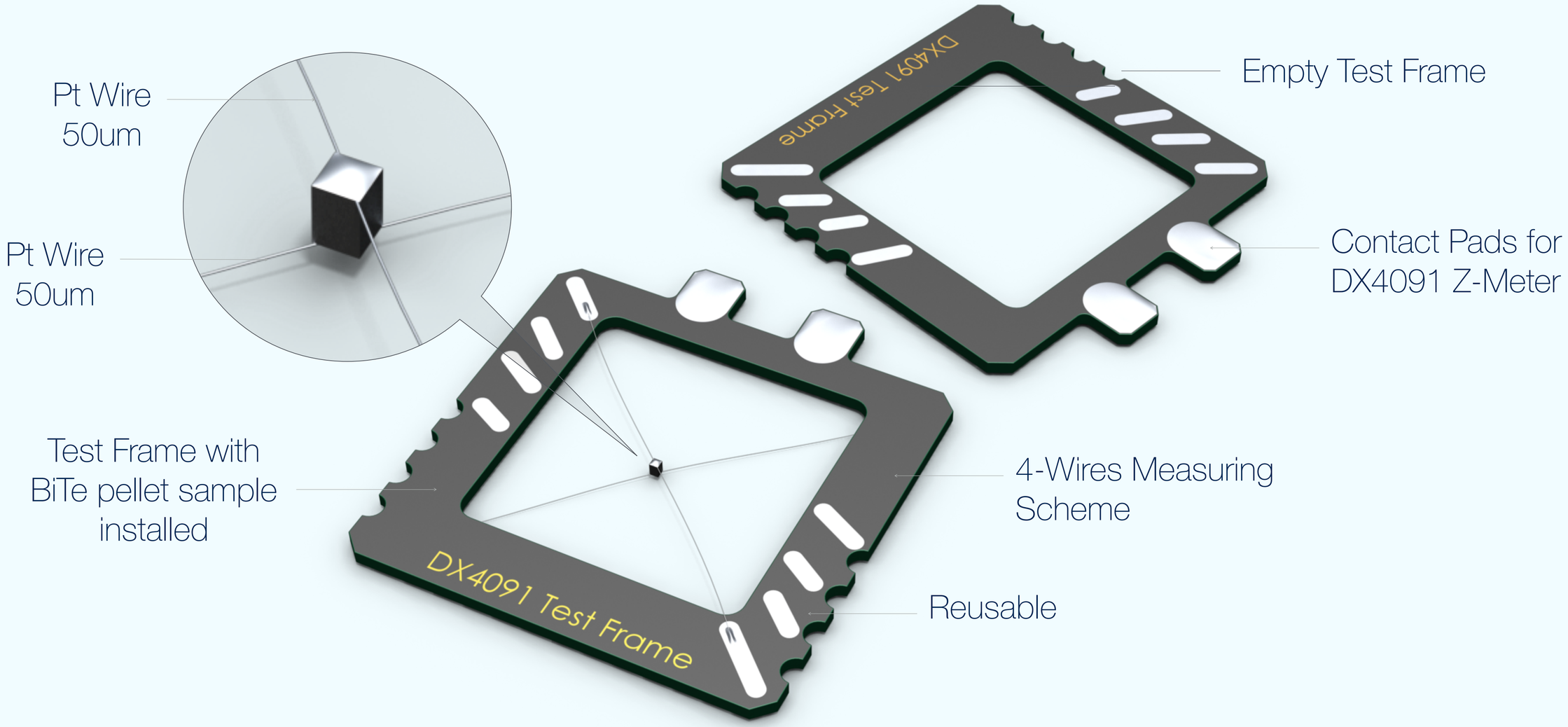
DX4091 Z-Meter - Test Frames



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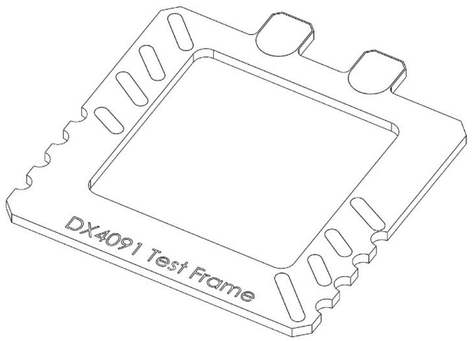
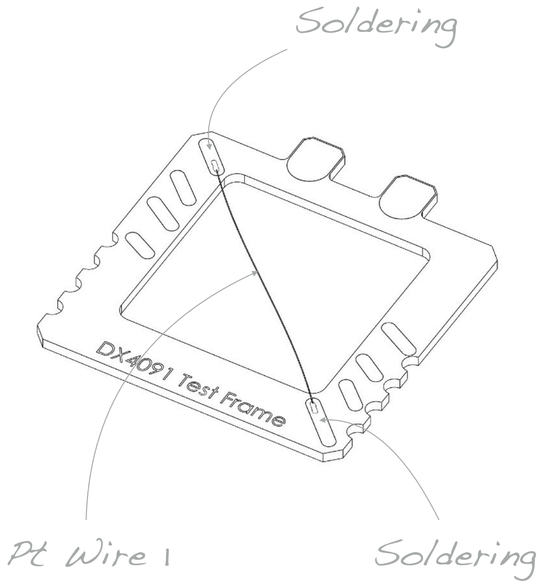
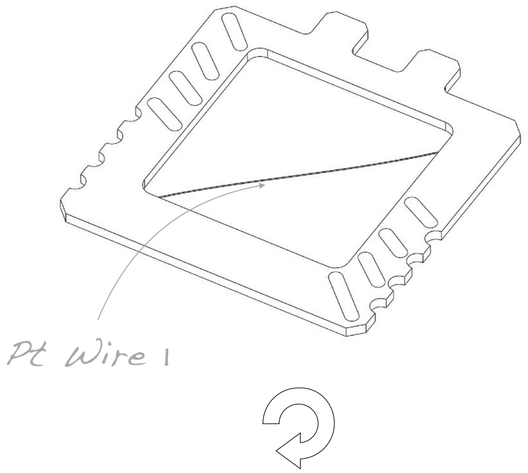
DX4091 BiTe Pellet mounting in Testing Frame



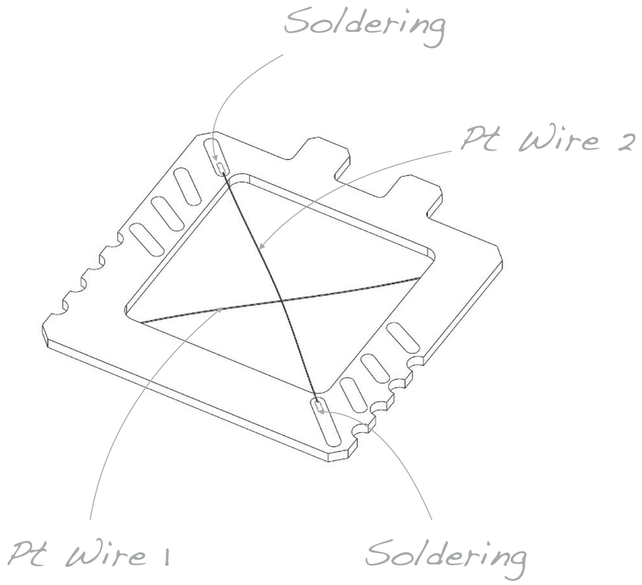
Take standard frame from DX4091 set



Solder Pt wires as shown



Turn the frame upside down



Solder the second Pt wire on backside

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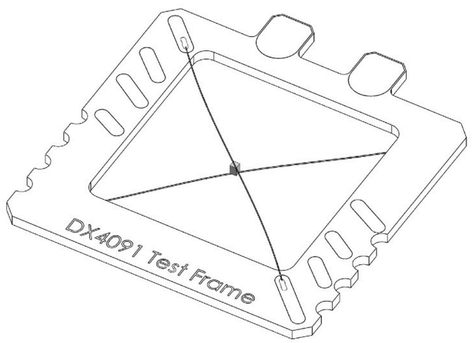
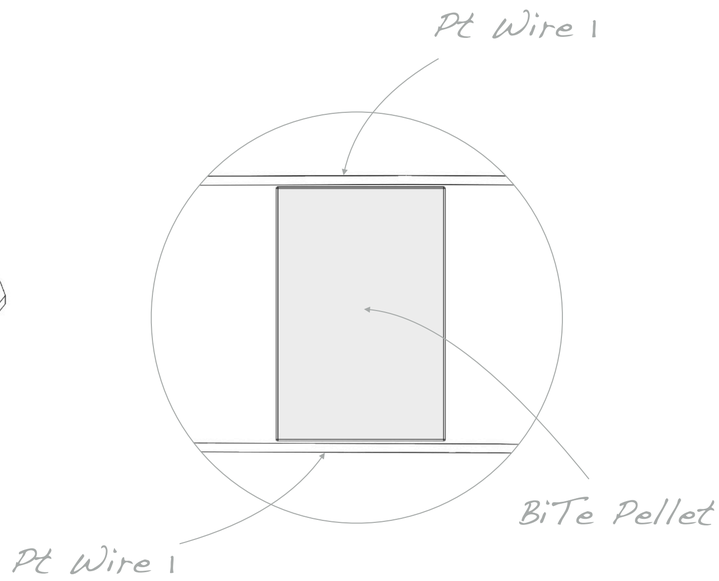
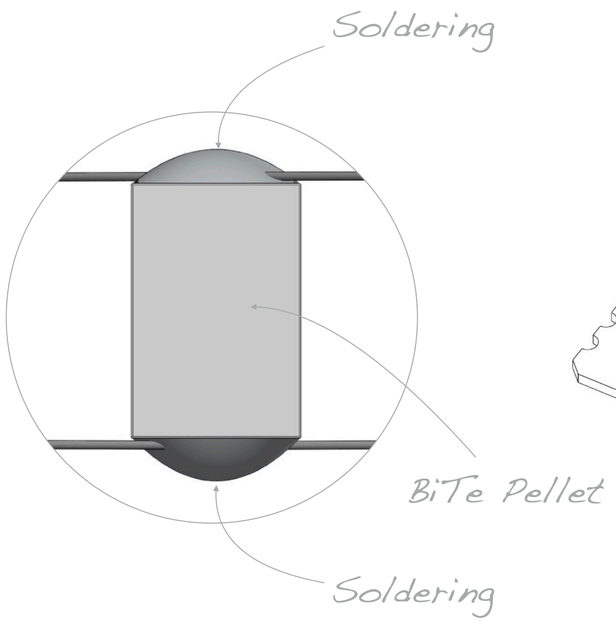
DX4091 BiTe Pellet mounting in Testing Frame



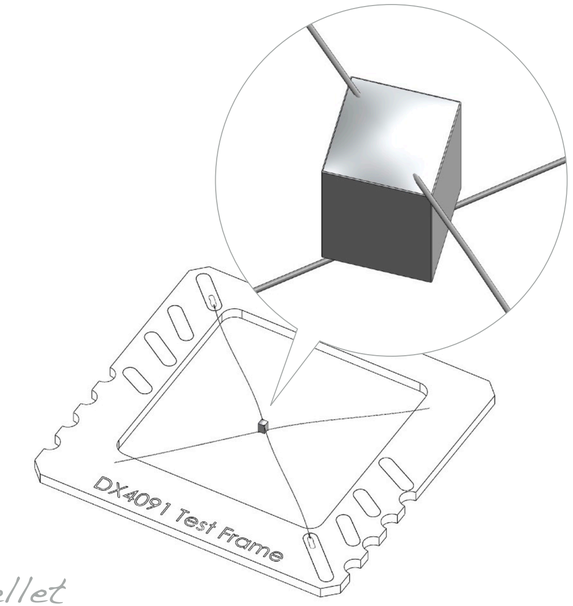
Place BiTe pellet sample between Pt wires



BiTe position between wires



Solder the wires to BiTe pellet



Ready to use Testing Frame with BiTe Sample

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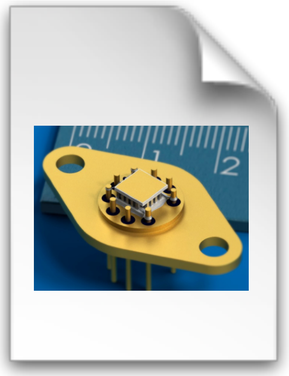

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