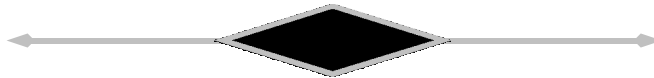
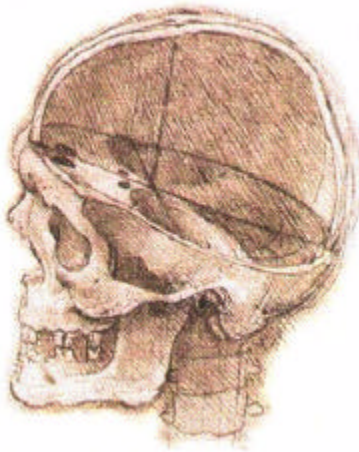
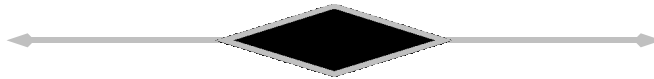


# Paleo-Tech Concepts



## Current Offerings - Spring 2000

*Osteometric Instrumentation  
for the Science Professional*  
<http://www.paleo-tech.com>

**Paleo-Tech Concepts**  
830 Seton Court  
Unit #2  
Wheeling, IL 60090 USA

Licensed  
Dealer for:



**Jim Kondrat**  
Phone: (847) 808-0488  
Fax: (847) 808-0269  
E-mail: [jim@paleo-tech.com](mailto:jim@paleo-tech.com)

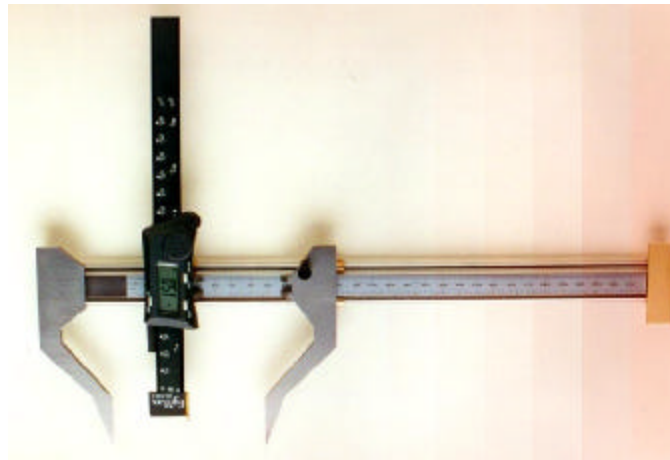
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# The PaleoCal-1

Patent Pending

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∞ Full Range Measurement on both Horizontal and Vertical Axis. 250mm+ Horizontal Analog Scale. + 70mm to -50mm Vertical Swiss Made Digital Scale.

∞ Jaw Geometry Allows the PaleoCal-1 to Function as a Coordinate Caliper, Simometer, and Traditional Caliper.

∞ Indexing of Coordinate allows Recording of Subtense along the Horizontal Plane. Vertical Scale can be Zeroed at any Point.

∞ Strong yet Light Weight Construction. Composed of Stainless Steel, Aluminum, Bronze and Brass, the PaleoCal-1 Weighs in at just under 14 oz.

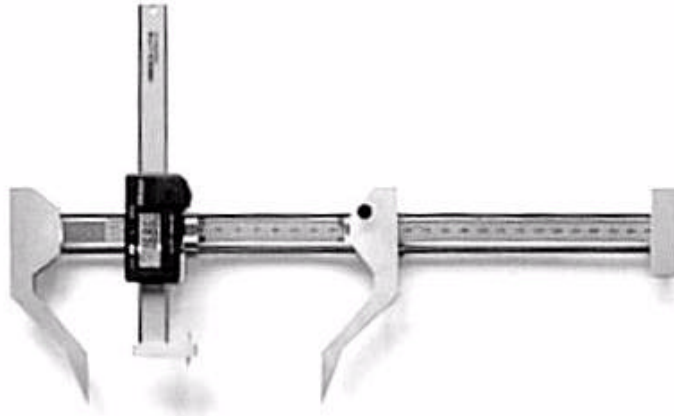
∞ Includes Padded High Impact Plastic Carrying Case.

∞ Full Lifetime Warranty Support to Include Repair or Replacement in Case of Accidental Damage.

∞ **\$425.00 plus Shipping (\$10.00)**

## The PaleoCal-2

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✍ Same Features and Design as the PaleoCal-1 but with an Improved Vertical Scale Which Allows Digital Interface with Personal Computer through a standard for Automated Data Collection and Processing of Subtense Measurements. (Additional equipment needed, see pages 16-17)

✍ In addition to Data Output, the Mitutoyo Absolute Scale used in the PaleoCal-2 retains its zero point even when shut off eliminating the need to calibrate the vertical index before each session.

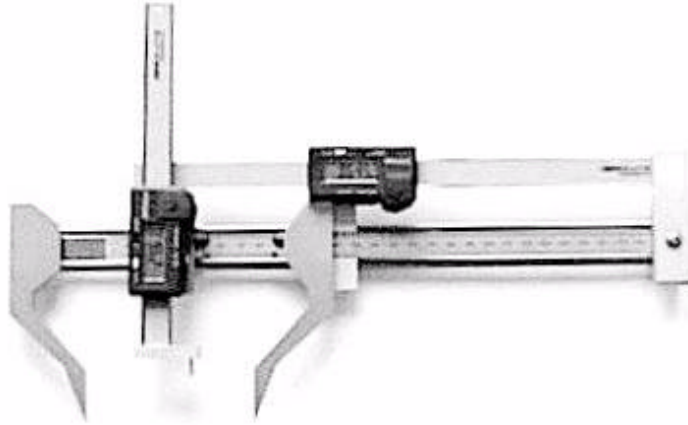
✍ Includes Padded High Impact Plastic Carrying Case.

✍ Full Lifetime Warranty Support to Include Repair or Replacement in Case of Accidental Damage.

✍ **\$600.00 plus Shipping (\$10.00)**

# The PaleoCal-3ti

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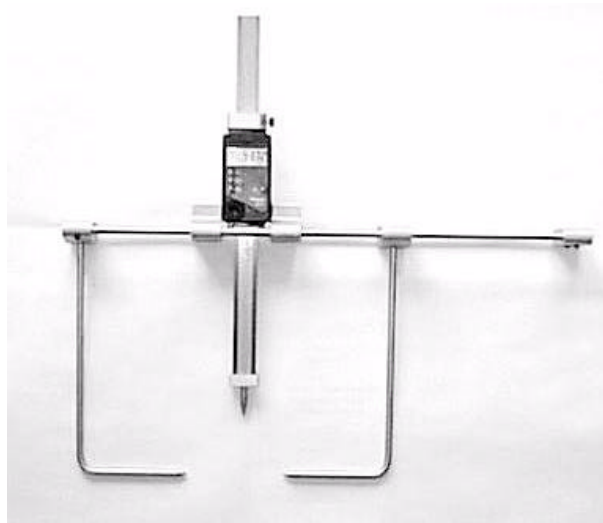


- ✍️ Jaws are Cut from Titanium Alloy Plate for Superior Resistance to Damage and Corrosion. Use of Titanium Reduces Weight of Jaw Elements by nearly 50% while Providing Nearly Twice the Strength of Stainless Steel.
- ✍️ All the Features of the PaleoCal-1 and 2 plus a Digital Horizontal Scale with Digital Interface. Allows Automated Data Collection of both Chord and Subtense Measurements and retention of zero calibration for **both** horizontal and vertical indices.
- ✍️ Horizontal and Vertical Scales Accurate to .01mm and Measures to 200mm. Horizontal Scale features Titanium Powder Coat for Increased Abrasion Resistance.
- ✍️ Includes Padded High Impact Plastic Carrying Case.
- ✍️ Full Lifetime Warranty Support to Include Repair or Replacement in Case of Accidental Damage.
- ✍️ **\$960.00 plus Shipping (\$10.00)**

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## The Paleo-Tech™ Radiometer

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- ✎ Based on the same dual rod assembly as the PaleoCal-1, the Paleo-Tech Radiometer provides extremely rigid but fluid motion of both the locking arm and coordinate index. This bearing and rod design assures extremely accurate distance reading from the trans-meatal axis regardless of the extension of the external auditory meatal anchor points.
- ✎ External auditory meatal anchor point is 4mm in diameter to assure accurate placement and rotation in the widest variety of cases.
- ✎ Coordinate index is digital and accurate to .01mm and can be zeroed at any point.
- ✎ Coordinate index has SPC output which allows Digital Interface with a proprietary “Mini-Processor” or Personal Computer though a standard RS-232 Port for Automated Data Collection and Processing of Measurements.



**Standard Light Weight Scale**

✍ A lighter horizontal reading digital scale may be substituted for the vertical scale pictured. This lighter scale incorporates Mitutoyo's Absolute technology which "remembers" your origin setting even when turned off. These benefits are offset by a slight loss in rigidity and the rotated digital readout. There is no cost for this option, please specify when ordering.

✍ Constructed of Stainless Steel, Aluminum, Bronze and Brass..

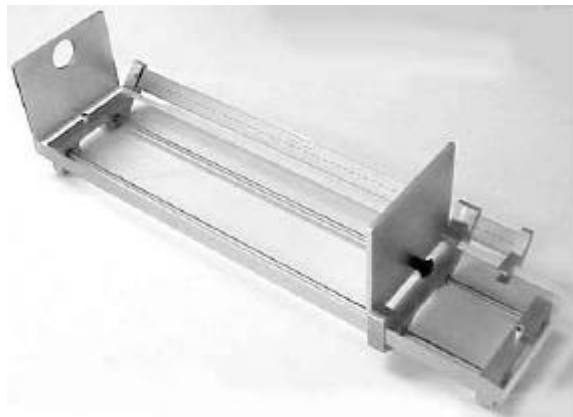
✍ Full Lifetime Warranty Support to include repair or replacement of Paleo-Tech manufactured components in case of accidental damage.

✍ **\$675.00 plus Shipping (\$15.00)**

✍ **Note: The Light Weight Scale is now standard, photo to be updated in next catalog issue.**

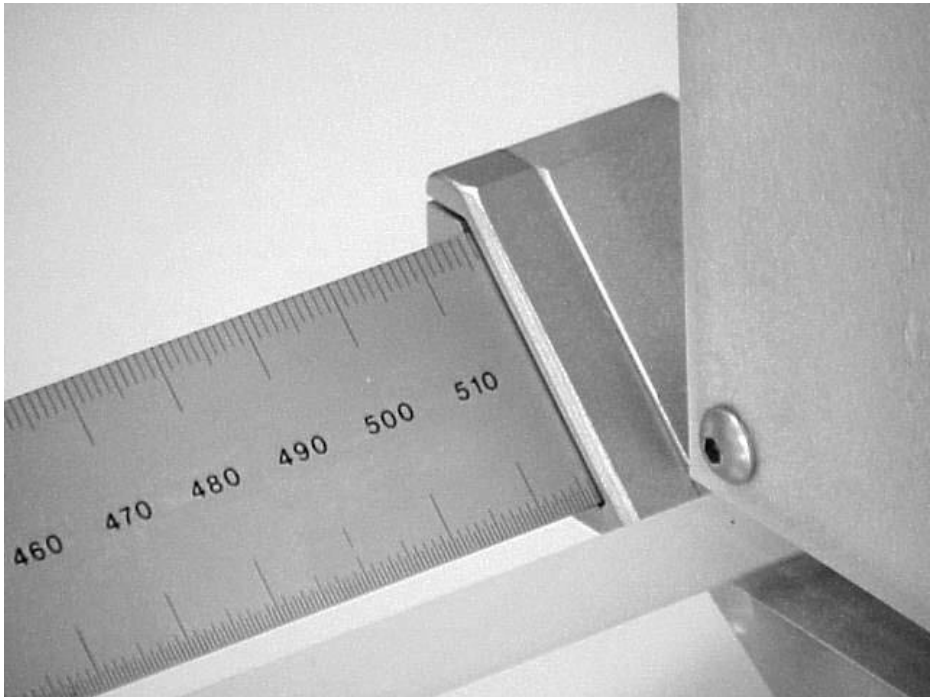
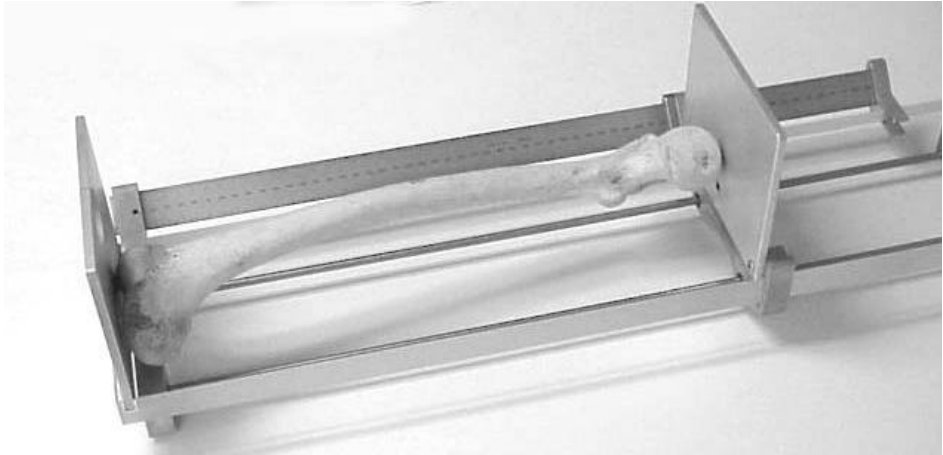
## The Paleo-Tech™ Laboratory Osteometric Board

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- ✍ Constructed of acrylic, aluminum, brass, and stainless steel, the Paleo-Tech Laboratory Osteometric Board provides the durability and accuracy required for years of reliable service.
- ✍ Measuring surface is suspended via the same rod bearing assembly utilized in the PaleoCal models and the Paleo-Tech Radiometer but incorporates a recirculating ball bearing bushing to provide unparalleled linear tracking and fluidity of motion.
- ✍ Measurement is accomplished via a linear scale ( 1/2 mm increment) mounted and indexed to the rear of the board.
- ✍ Vertical planes are removable for ease of storage and shipment.
- ✍ **\$375.00 plus Shipping. (\$15.00)**

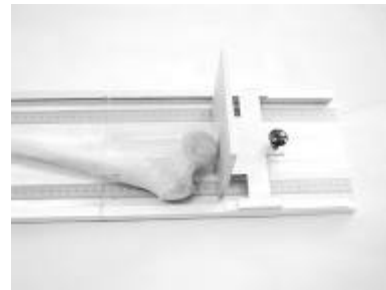
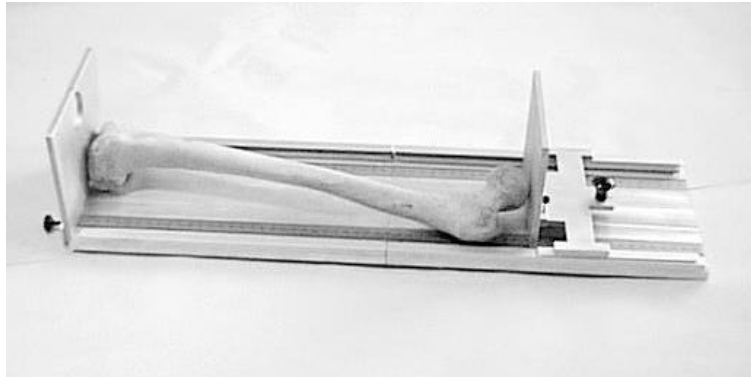




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## The Paleo-Tech™ Field Osteometric Board

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### ✍️ **New All Metal Design!!!**

✍️ The Field Osteometric board features the same measurement method as the Laboratory Osteometric Board minus the rod and bearing assembly but is collapsible to 12" x 6.5" x 1 1/2".

✍️ Constructed entirely of aluminum and stainless steel, the Field Osteometric Board is impervious to the elements and changes in altitude or humidity.

✍️ Packed weight with carrying case is 12 lbs.

✍️ **\$350.00 plus Shipping. (\$15.00) Padded Carrying Case Included**

## The Paleo-Tech™ Spreading Caliper

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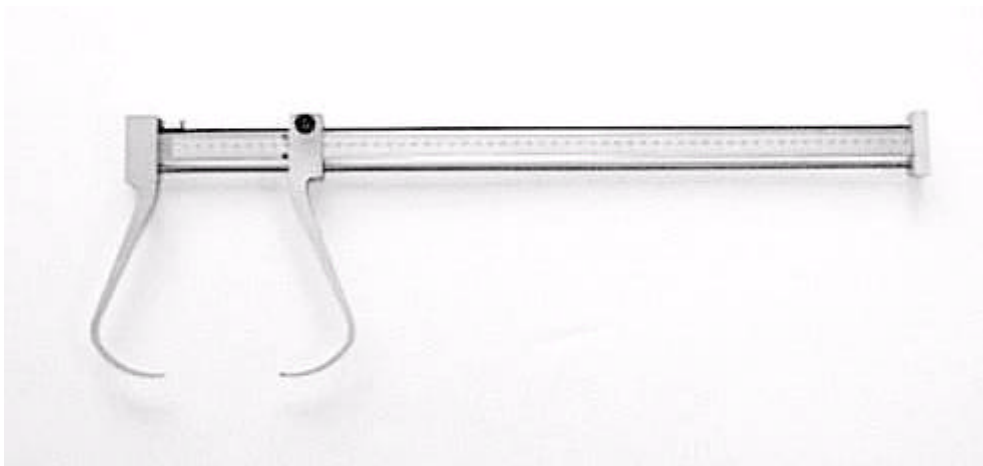


- ✍ Main body is machined out of aircraft grade 1/4 inch thick aluminum plate. Measuring surfaces are ground stainless steel points to assure accuracy after long term use. **Rounded ball bearing points** are available on request (**please specify when ordering**)
- ✍ Scale is machined stainless and permanently laser engraved 0 - 30 cm. Accurate to 1/2 mm with interpolation. Can be mounted in traditional or reversed position (specify when ordering).
- ✍ Joint surface utilizes a stainless steel contact plate and Teflon washer to afford even friction along the measurement range eliminating the need for a thumb lock.
- ✍ Entire unit weighs in at less than 6 1/2 ounces bringing the user to a new level in ease of use.
- ✍ Main body dimensions are 12" x 4" when closed.
- ✍ **\$350.00 plus Shipping. (\$10.00) Padded Carrying Case \$35.00.**

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## The Paleo-Tech™ "Linear" Spreading Caliper

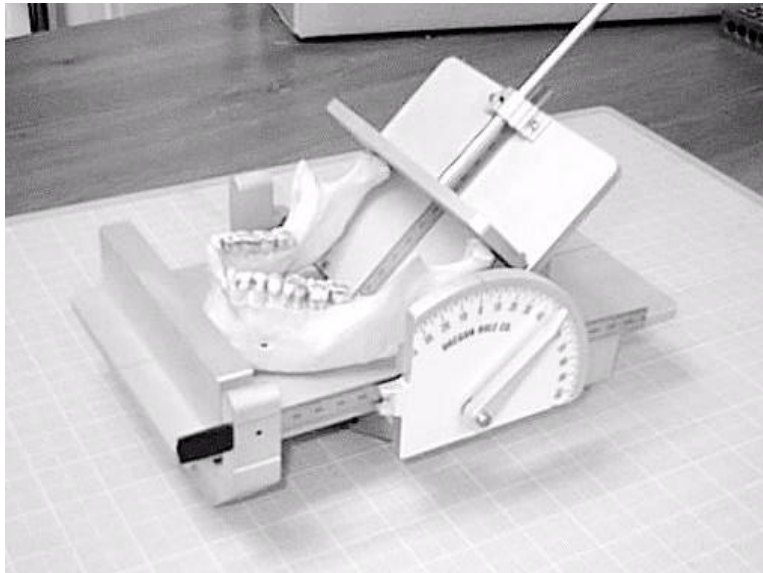
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- ✍ The Paleo-Tech "Linear" Spreading Caliper provides greater flexibility coupled with reduced cost for those needing a spreading caliper with a range greater than 300mm.
- ✍ Measurement of up to 600mm are taken on a standard linear scale.
- ✍ Jaws are constructed of .25" stainless steel plate.
- ✍ Features the same dual rod and bearing assembly utilized in the PaleoCal and Radiometer Models.
- ✍ Additional jaw geometry and rounded jaw points are available. Call or e-mail to discuss options
- ✍ Digital readout is available (please call for pricing).
- ✍ **\$480.00 plus Shipping (\$25.00) Call for Carrying Case Availability**

## The Paleo-Tech™ Mandibulometer

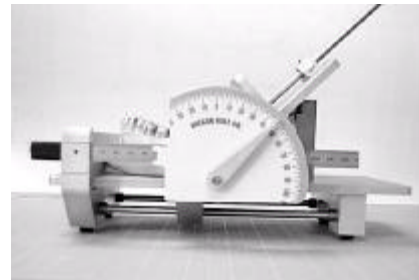
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Based on traditional mandibulometer designs, the Paleo-Tech Mandibulometer improves linear tracking by using the same dual rod and bearing system as featured in other Paleo-Tech instruments but utilizes state-of-the-art recirculating linear ball-bearing bushings in the design.

Manufactured of entirely of Aluminum, Stainless Steel, and Bronze.

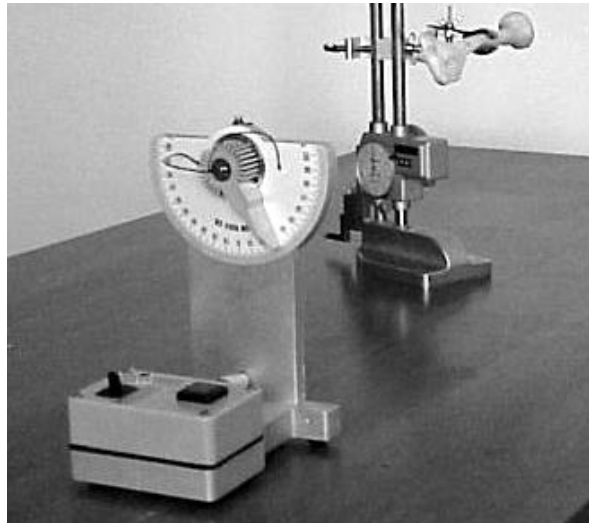
**\$500.00 plus Shipping (\$10.00) Padded Carrying Case Included**



## The Paleo-Tech™ Laser Torsimeter

Based on Krahl (1944) as featured by Larson (JHE, v. 31, p. 240).

Measurement is accomplished via a linear beam which is projected by a low power visible spectrum laser mounted to a 0 - 180 - 0 degree scale. Scale is marked in 1 degree increments with 1/2 degree interpolation possible.



The laser line generator is designed for industrial use and has a rated life of at least 40,000 hours of continuous use.

Laser can be operated continuously for 5 hours on 1 9Volt battery or use optional AC power adapter.

Platform is constructed of 1" thick acrylic to provide stability during measurement. Adjustable feet and bubble level assure proper alignment.

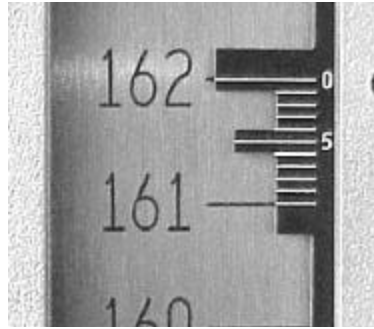
Torsimeter collapses for easy transport.

**\$600.00 plus Shipping. (\$15.00) AC Power Adapter \$65.00**

**Padded Carrying Case \$35.00.**

# The Paleo-Tech™ Anthropometer

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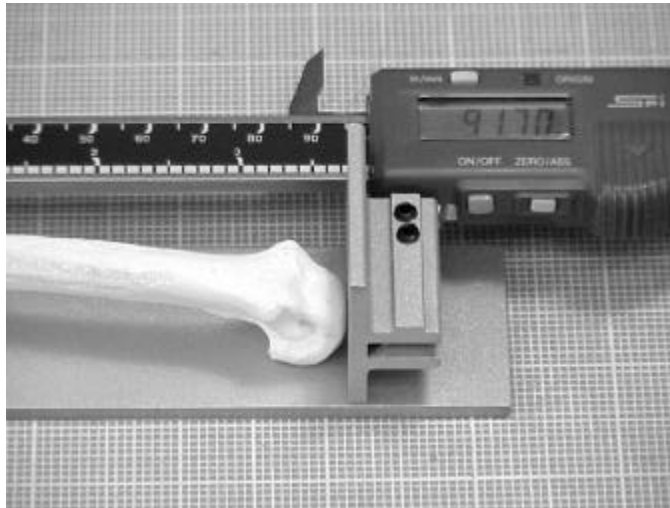
- ✍ Body constructed of 1 inch square stainless steel tubing.
- ✍ 0-230cm laser engraved scale.
- ✍ Cursor machined from 3 inch billet aluminum block. Vernier laser etched scale allows precision reading to 1mm resolution and 1/2mm interpolation possible.
- ✍ Anthropometer body consists of 4 sections approximately 26 inches in length each when disassembled.
- ✍ Reversible measuring arm consists of a pointed and flat end to accommodate precision placement of anatomical points and overall height.
- ✍ Bubble level mounted to cursor.
- ✍ Adjustable base secures anthropometer during use and allows angular adjustment to compensate for uneven floor.
- ✍ Packed weight approximately 10 pounds.

**\$940.00 plus Shipping (\$20.00)**  
**Includes Cloth Carrying Case and Base Plate.**

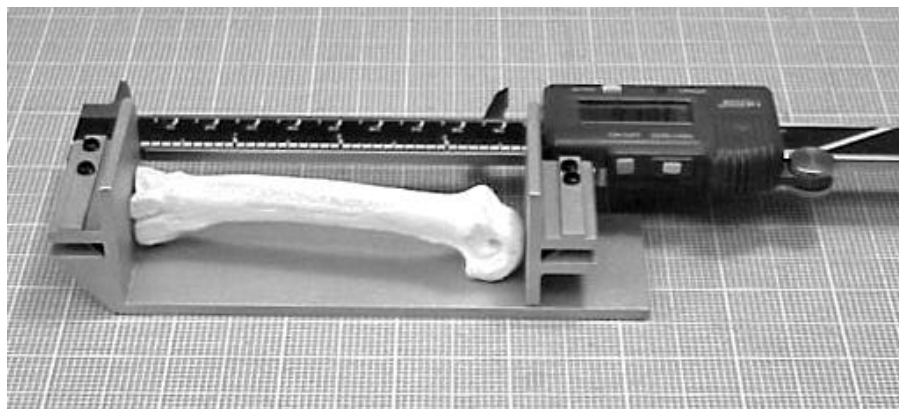


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## The Paleo-Tech™ Mini-Osteometric Board



- ⌘ Designed to easily attach to most Mitutoyo Digital Calipers, the Mini-Osteometric Board allows precise linear measurement of small bones or other specimen where a traditional caliper or full size osteometric board won't do.
- ⌘ Machined out of Billet aluminum, the Mini-Osteometric Board attaches to your caliper via four set screws in seconds.
- ⌘ Allows accurate linear measurement to .02mm.





# Mitutoyo Input Tool PS/2 Keyboard Interface

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✍ Mitutoyo's Input Tool is a simple 1-channel interface unit that allows measurement data to be easily sent to a PC-based spread sheet such as MS-Excel, Lotus-123, etc., in just one step, no software bridge required!!!

✍ Powered by computer. Connects via PS/2 PC interface.

✍ Automatic line feed with each data reading. Can be customized with macros.

✍ NOTE: This is a single input device. Only one caliper or gage can be attached at a time. Cannot be used with USB keyboards. Caliper or gage must have SPC port. Caliper to input tool cable required (see below).

✍ **Mitutoyo Input Tool for Keyboard Port \$99.00 plus Shipping (\$5.00) Order No. 264-005**

**1 Meter Cable \$35.00 (Part# 959149)**

**2 Meter Cable \$39.50 (Part# 959150)**

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## "SmartCable" Single Input Digital Gage Interface

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- ✍ Static or Dynamic (MIN, MAX, TIR) Mode operation.
- ✍ Optional footswitch operation (\$45.00).
- ✍ Low power requirements (draws power from PC)
- ✍ RS-232 Communication using Standard serial port..
- ✍ ASCII text string output to any Windows program with RS-232 capability such as Win95 Hyperlink which can then be ported to any format to include Excel, SAS Text, etc.
- ✍ Lifetime warranty.
- ✍ Small size: 1.5" w x 4.25" d x 1" h
- ✍ **\$165.00 plus Shipping. (\$7.00)**
- ✍ **Requires 1 or 2 Meter Cable featured on last page.**

## **SPI PLASTIC DIGITAL CALIPER**

Extra large, easy to read LCD display. Measure inch/metric. .001"/0.1mm reading. Set zero at any point in the entire range then measure plus or minus deviation. A Thumb Wheel Provides Precise Manipulation of the Measuring Jaws. "B" indicates battery is low. This Very Accurate and Light Weight Caliper is the same one used as the Coordinate Index in the PaleoCal-1. Made in Switzerland from glass fiber reinforced plastic. Uses Battery No. 357 (SR44). (included).

**\$52.25 plus Shipping (\$5.00)**

**Order No. 30-440-2 Right Handed Model**

**Order No. 30-439-4 Left Handed Model**



## **SPI POLYIMID DIAL CALIPER**

An Accurate and Very Economical Choice, this Dial version features surprisingly strong, Super-Polyimid, 60% fiberglass, corrosion resistant construction. Dial graduation is .1mm in 150mm total range. 10mm per revolution. Made in Switzerland.

**\$20.50 plus Shipping (\$5.00)**

**Order No. 31-415-3**



## **MITUTOYO STAINLESS STEEL DIAL CALIPER**

Extra rigid main beam. Accuracy .01mm in 150mm, 5mm per revolution. Hardened Stainless Steel throughout. Micro-Fine graduations. Adjustable and locking bezel. Covered rack to keep gear teeth clean. Easy zero adjustment. Satin chrome finish. Furnished with Fitted Case.

**\$84.55 plus Shipping (\$7.00)**

**Order No. 505-633-50**



## High End Measurement Technology

### MITUTOYO MYCAL E-Z W/ABSOLUTE ENCODER

Digital LCD Display. Inch and Metric Capability. Zero Capability at any Point.

New feature allows memory of origin setting to be maintained when switched off. 0.01mm Resolution. Supplied with fitted case. 150mm Caliper Pictured.

**100mm \$98.00 Order No. 500-195**

**150mm \$107.00 Order No. 500-196**

**200mm \$152.00 Order No. 500-197**

**300mm \$296.00 Order No. 500-193**

**plus Shipping (\$7.00)**



### MITUTOYO ABSOLUTE STAINLESS STEEL DIGITAL CALIPERS W/ DIGITAL OUTPUT

Same features as the above model (No. 500-196) but with the addition of digital interface for automated data recording.

**100mm \$122.00 Order No. 500-170**

**150mm \$132.00 Order No. 500-171**

**200mm \$172.00 Order No. 500-172**

**300mm \$365.00 Order No. 500-173**



### MITUTOYO WATER AND DUST RESISTANT DIGIMATIC CALIPER

Protection to IP-54 (International Protection) Level. Protection against dust deposits, oil and water splashed from any direction. Features "Absolute" Encoder Technology which allows origin to be set once and "remembered" for the life of the batteries. Automatic shutdown after 20 minutes of idle. Accurate to .01mm.

**0-100mm \$342.00 plus Shipping (\$7.00)**

**Order No. 500-327**



## MITUTOYO DIGIMATIC CARBON FIBER CALIPERS

These large Digimatic Calipers have a beam constructed of a strong carbon fiber which makes them both durable and easy to handle. Standard jaws will take both outside and inside measurements. Optional attachments available for special measurements. Functions include: Preset of desired starting point, Inch/mm conversion, zero-setting, data hold, error alarm, low battery alarm, data output. .0005"/.01mm Accuracy.

**0-300mm \$587.00 plus Shipping (\$10.00)**  
**Order No. 552-311**

**0-450mm \$678.00 plus Shipping (\$10.00)**  
**Order No. 552-312**

**0-600mm \$753.00 plus Shipping (\$15.00)**  
**Order No. 552-313**

**0-1000mm \$1350.00 plus Shipping (\$20.00)**  
**Order No. 552-314**

**0-1500mm \$1610.00 plus Shipping (\$25.00)**

## MITUTOYO DIGIMATIC OFFSET POINT CALIPERS

The geometry of this caliper allows the horizontal measurement of surfaces with differing vertical planes. Digital readout accurate to .0005"/.01mm.

**0-150mm \$322.00**  
**plus Shipping (\$7.00)**  
**Order No. 573-201-10**



**MITUTOYO  
DIGIMATIC LONG-  
JAWED CALIPERS**

The sharp jaw edges provide easy access to portions that ordinary calipers cannot measure. Digital readout accurate to .0005"/.01mm.

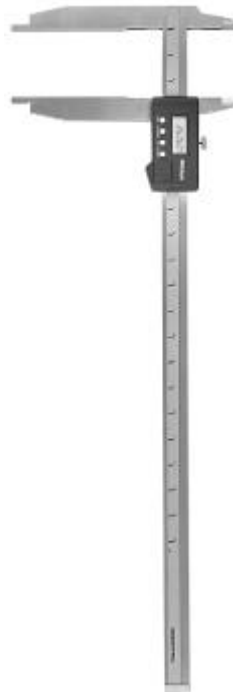
**0-200mm \$414.00 plus Shipping (\$10.00)**

**Order No. 551-221-10**

**0-500mm \$915.00**

**plus Shipping (\$10.00)**

**Order No. 551-224-50**

**MITUTOYO  
DIGIMATIC  
OUTSIDE POINT  
CALIPERS**

The unique geometry of this caliper allows the measurement of surfaces below ridges, protrusions, or other obstructions. Digital readout accurate to .0005"/.01mm.

**0-150mm \$574.00**

**plus Shipping (\$7.00)**

**Order No. 573-252-10**





## **MITUTOYO DIGIMATIC MICROMETER**

When the highest accuracy is essential, this micrometer will provide .00005"/.001mm of resolution. Features two modes of measurement, Absolute and Incremental (for relative readings between points). Friction thimble. Also available with data output port.

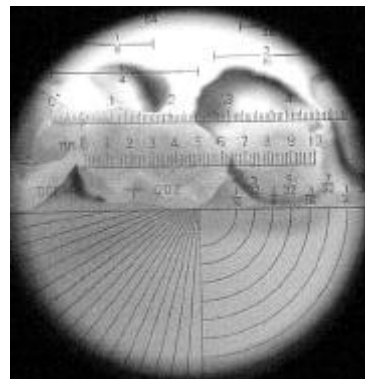
**0-25.4mm \$132.00 plus Shipping (\$7.00)**

**Order No. 293-765-30**

**0-25.4mm \$178.00 plus Shipping (\$7.00) (Data Output Model)**

**Order No. 293-725-30**

## High End Measurement Technology



### **SPI MINI-OPTICAL COMPARATOR**

- ✎ Allows direct visual measurement via a graduated scale inside the view piece.
- ✎ Magnification = 10X
- ✎ Standard Reticle includes English, Metric, Angular, and Diameter measurement scales.
- ✎ Includes velvet lined storage case and lens cap.
- ✎ Other configurations available, please call for options.

**SPI 10X Deluxe Comparator with #5 Reticle, 1-3/8" Diameter, in velvet fitted case**

**\$79.00 plus Shipping (\$5.00)**



## Dental Morphometric Instruments

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### MITUTOYO VERNIER POINTED JAW CALIPER

Perfectly suited for dental anthropology, this vernier version of Mitutoyo's Pointed Jaw caliper reads metric. Accurate to .05mm. Furnished with Fitted Case.

**\$130.00 plus Shipping (\$7.00)**

**Order No. 536-121**



### MITUTOYO DIGITAL POINTED JAW CALIPER

Same jaw geometry as the vernier version, this digital caliper adds digital interface for automated data collection and English and Metric capability. Accurate to .01mm.

Furnished with Fitted Case.

**\$266.00 plus Shipping (\$7.00)**

**Order No. 573-221-10**



### MITUTOYO DIGITAL EXTENDED POINT JAW CALIPER

Same construction and features as #573-221-10 but with an even slimmer jaw geometry. Furnished with Fitted Case.

**\$332.50 plus Shipping (\$7.00)**

**Order No. 573-225-10**



## The Paleo-Tech™ Guarantee

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For years, osteometric researchers have been constrained by the lack of availability in precision measuring instruments. This lack of availability has created a monopoly for manufacturers who could demand exorbitant prices. This monopoly has also created a stagnation in the evolution of osteometric measurement technology. The combination of these factors has forced the researcher into purchasing overpriced, under-engineered instruments. Recognizing consumer concerns is only the first step. To really understand those concerns the developer of any new product must first live them. I have founded Paleo-Tech Concepts as a result of performing osteometric research first hand through Northern Illinois University's Masters program. A scientist by education and machinist by vocation, I have decided to address the current lack of choice available to today's researcher. I have vowed to provide the highest quality, best engineered, and most reasonably priced instruments to student and research professional alike.

All of the instruments that Paleo-Tech manufactures are unconditionally guaranteed against defect for the life of the purchaser. Should something fail due to construction or design, call me and I will repair the unit free of charge (shipping not included). In addition to this guarantee against defect, I also extend protection against accidental damage. I realize what an investment this type of instrument is to the researcher and will, free of charge, repair any non-malicious damage that may come to the instrument under normal use (i.e. damage due to a fall off of a lab table, accidental immersion in a fluid, etc.). This warranty is transferable if I am notified by the seller to whom the instrument is being sold. Instruments not manufactured by Paleo-Tech, and such components incorporated into a Paleo-Tech design are covered under their respective manufacturer warranty.

## Ordering Information

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As of May 1997, Paleo-Tech Concepts is a licensed dealer of Mitutoyo instruments, tools, and gages. If you require a caliper, gage, or other instrument made by Mitutoyo but not featured in this catalog call to discuss pricing and delivery details.

Several instruments are slated for design in the future. All will be based on traditional designs but improved in areas which can benefit from modern technology. If you have any specific needs for an instrument which is not featured in this catalog, please call. Every original design is the direct result of expressed interest from working anthropologists. There is no fee for consult, in fact, you may be asked to participate in the design process and receive a prototype for your evaluation.

I will attend the annual meeting of the AAPA as well as other events to exhibit and demonstrate my tools. If you live and/or work in the Chicago-land area or within a reasonable distance, I would be happy to visit and demonstrate my product line or discuss potential projects.

Each Paleo-Tech instrument requires 8 - 16 or more hours of machining and assembly. As such, a lead time of 6-8 weeks is required before shipment. However, this time requirement is subject to demand and it is not uncommon to ship in less than 48 hours from order placement if no backlog exists. Prices in this catalog are subject to change without notice.

Paleo-Tech Concepts will accept institutional purchase orders, Visa/MasterCard, and personal check. Fax, e-mail, or phone to place an order. Shipping is via UPS Ground. Cost is based on a single instrument purchase. If ordering more than one instrument, please call to obtain shipping charges. Please call for shipping cost if delivery is outside the



