

HIC^{PRO}



HGL
Dynamics

Wireless Head Injury Criterion Meter



Practical | Precise | Portable

Key Features

- Ultimate in Portable HIC Measurement
- Full Wireless Operation
- Built-in Removable Dytran Triaxial Accelerometer
- Built-in MEMS Accelerometer for Height Calculation
- 2+ Hours Operating Time (AA NiMh Batteries)
- On-board Storage (128GB)
- Onboard HIC & Height Indication



Wireless Head Injury Criterion Meter

Introduction

HIC^{PRO} represents the ultimate in handheld Head Injury Criterion measurement equipment. Within the ultra-compact handle it provides 3 axes of accurate acceleration measurement using a calibratable Dytran 10mV/g Triaxial accelerometer. The handle also houses a MEMS based 3 axis Accelerometer and 3 axis Gyroscope for accurate height and attitude measurement.

The HIC^{PRO} includes a modern ARM processor to calculate the Height and HIC value for each drop as well as determining the quality of each drop immediately after it is completed (within 100mS). Drop data is recorded to an onboard non-volatile storage device (128 GB capacity) and can also be streamed in real-time over Wi-Fi to a connected PC, Tablet or Phone for instant display from a distance.

Power is supplied by 4 on-board AA cells which can be either Alkaline (1+ hours operation) or NiMH rechargeable (2+ hours operation), When not in use the unit can be disconnected from the batteries via the simple On/Off switch. The use of standard AA cells allows change of batteries within seconds for extended operation, as well as simple access to new batteries worldwide.

HIC^{PRO} includes a built-in OLED display screen that indicates the Height and HIC value from the last drop locally to the user, for occasions when simple operation is required.

Portable

TRIAx Accelerometer

10mV/g Removable
Calibratable

Powerful Processing

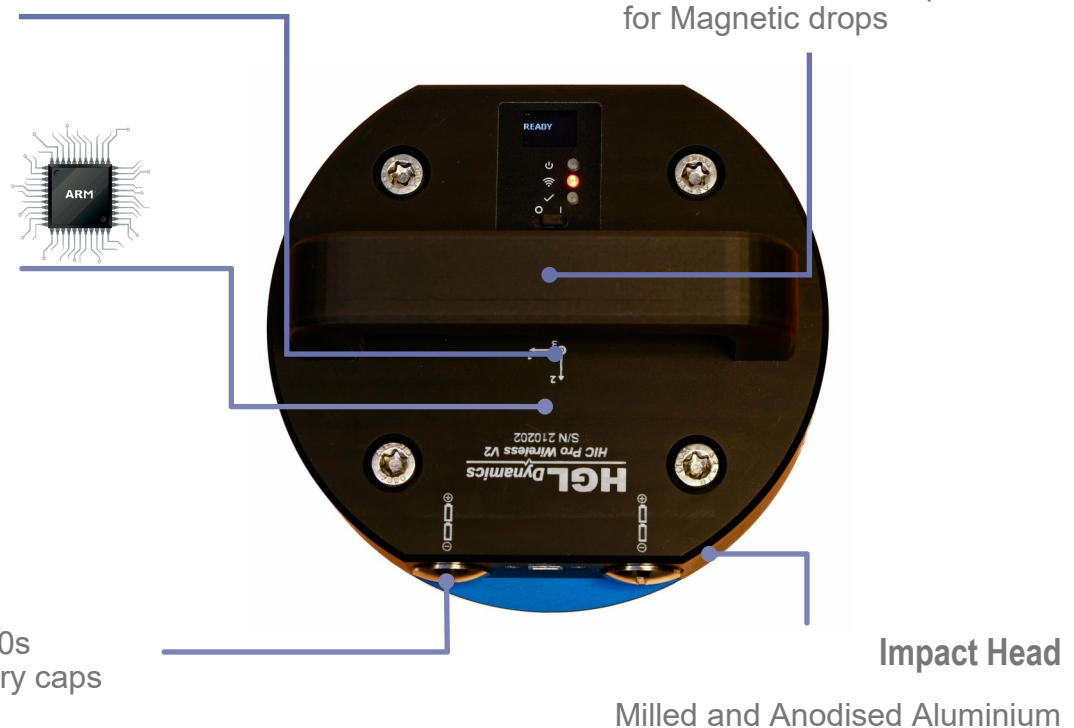
Embedded FPGA &
ARM CPU
LED Indicators
OLED Text Screen
MEMS Height Triax

AA Bateriaes, USB

Replace Bateriaes < 10s
Secure screw-in battery caps

Magnetic Handle

Carbon Fibre reinforced
with embedded stele plate
for Magnetic drops



Impact Head

Milled and Anodised Aluminium

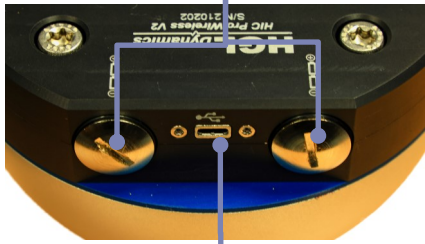


Wireless Head Injury Criterion Meter

Practical

Standard AA Batteries

Available Anywhere



Standard USB C Interface

Tethered Operation
Data Upload

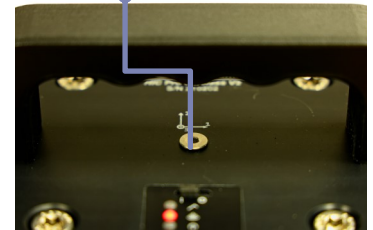
Sensitivity Indicator

Blue—500g Range
Red—5000g Range



Precision Triaxial Accelerometer

10mV/g Dytran
Removable for Calibration



Clear Indicators

Power LED
Wifi LED
Good Drop LED
OLED Display

Simple On/Off Switch

Precise

General

Dimensions (W x H x D):	160 x 160 x 260mm
Weight:	4,600g (+/-0.5%)
Supply Voltage:	4 x AA Batteries 5.0 V DC (USB)
Power:	1.5 W (typical)

Environmental

Operating Temp.:	-30 to 70°C
Storage Temp:	-40 to 85°C
Relative Humidity:	< 95% RH non condensing

Input Configuration

Input Channels:	3 Analogue, 6 MEMS
ADC Type:	Sigma Delta
Quantization:	16-bit
Input Ranges:	±10 V, ±1 V, ±0.1 V
IEPE:	4 mA
DC Offset:	< ±0.1 mV
Input Coupling:	AC, DC *
Input Impedance:	>100 kΩ
SNR:	>90 dB
Anti-aliasing:	<-100 dB
Sample Rate:	10 kHz
Frequency Response:	DC to >10 kHz ±0.1 dB
Battery Life:	2 hours (1500mAh), 3 hours (2500mAh)
Wifi Range	25+ metres (typical)
Accuracy:	< 0.5% (HIC error) <1% (Height reading)





Wireless Head Injury Criterion Meter

Training

Training

HGL Dynamics offers a wide variety of training workshops and courses. Workshops are conducted at one of our global offices or at the client's site by our training team, all of whom have many years' of industry experience and knowledge.

Typical training courses include: Vibration Fundamentals, Signal Processing, Rotating Machinery, Advanced use of HGL Software and Analysing Large Datasets.



Information

About HGL Dynamics

HGL Dynamics is a world-leading supplier of services and high specification equipment for the integrated capture, monitoring, analysis, storage and management of high bandwidth data.

Purchasing & Availability

The HGL Dynamics HIC^{PRO} is now available for purchase or lease. Please contact one of our HGL Dynamics offices below for further information or to request a quote:

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