

SMARTSOLO



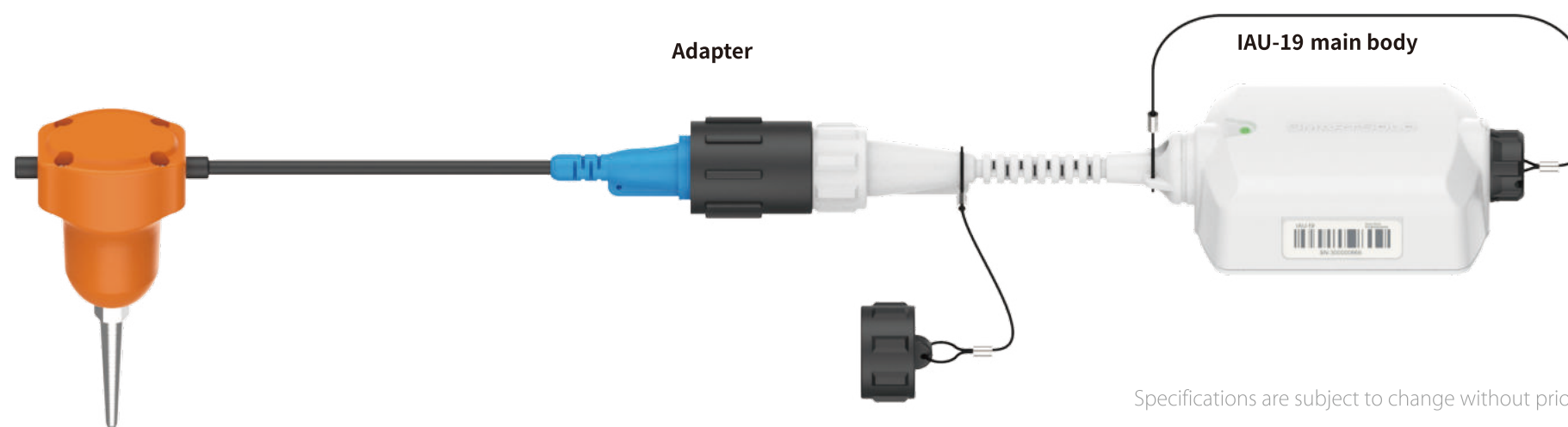
IAU-19 Features

IAU-19 is a new generation smart seismic acquisition node used to connect with external land and marsh geophone or hydrophone. It has wireless QC functionality to enable a field deployment tool or mobile phone to check for good status. This includes recording parameters, battery voltage, temperature, remaining data storage, GPS position and quality, connected sensor status and more.



- ✓ Wireless QC including ambient noise and real-time signal check
- 16GB 16GB internal memory
- Can use land geophone or marsh geophone/hydrophone
- Built-in high capacity rechargeable battery
- External sensor leakage test capability
- Fast data download speed

IAU-19 Components



General Specification

Seismic data channel(s)	1
ADC resolution	32 bits
Sample intervals	0.25, 0.5, 1, 2, 4 milliseconds
Preamplifier gain	0dB to 36 dB
Anti-alias filter	206.5 Hz @ 2ms (82.6% of Nyquist) Selectable - Linear Phase or Minimum Phase
DC blocking filter	1Hz to 10Hz, 1Hz increments or DC Removed
Data Storage	16GB internal memory
Operating Life@25°C	25 days Continuous 50 days Segmented (12hours ON/12hours SLEEP)
Recharge Time	< 3 hours
Charging Temperature Range	+3°C ~ +45°C
Wireless QC	Recording parameters, battery voltage, temperature, remaining data storage, GPS position and quality, connected sensor status

Physical Specification

Physical Size	132mm(L) × 97mm(W) × 50mm(H) (Without external DCK plug)
Weight	0.8 kg
Operating temperature	-40°C ~ +70°C
Waterproof	IP68

Channel Performance (@ 2ms sample interval, 31.25 Hz, 25°C, unless otherwise indicated)

Maximum Input Signal	±2.5Vpeak @ Gain 0dB
Dynamic Range	125dB@ 2ms Gain 0dB
Equivalent Input Noise	0.18μV@ 2ms Gain 18dB
Total Harmonic Distortion	< 0.0002%@ Gain 0dB
Common Mode Rejection	≥100dB
Gain Accuracy	< 0.5%
GPS Time Standard	1 ppm
Timing Accuracy	± 10μs, GPS Disciplined

IAU-19
External Intelligent
Seismic Acquisition Unit
www.SmartSolo.com

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SCIENTIFIC

The leading manufacturer in serving geoscience

Specifications are subject to change without prior notice.



The leading manufacturer in serving geoscience

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IAU-19 Peripherals

IAU 2 Slot All-In-One

IAU AIO-2 is a portable device specially designed for IAU-19 intelligent seismic acquisition units with 2 slots for battery charging, data download, and testing.

Size(L×W×H): 247*204*163 mm
Weight: 3.8 kg
Layout: 2 slots (One for Charge; One for Download/Test)
Status Indication: USB 3.0*1, DC Power*1
Connection Type: LED on Adapter (Indicate Charge)
LED on Panel (Indicate Download)
Power Supply: 8.4V, 2A
Working Humidity: 20%~90%RH, No condensing



IAU 16 Slot All-In-One

The IAU AIO-16 is a portable device specifically designed for the IAU-19 intelligent acquisition units, with 16 slots for battery charging, data download, and testing.

Size(L×W×H): 625*500*366 mm
Weight: 28.5 kg
Layout: 16
Status Indication: LED
LED: 2 LEDs/slot
(Left light: Download/Test Right light: Charge)
Connection Type: USB 3.0
Power Supply: 100-240V AC, 50/60Hz
Max Consumption: 640 W
Working Humidity: 20%~90%RH, No condensing



IAU 48 Slot All-In-One Rack

The IAU 48 Slot All-In-One Rack (IAU AIO-48) is a device specifically designed for the IAU-19 Intelligent Acquisition Unit to perform battery charging, data download, and testing.

Size(L×W×H): 650*320*1810 mm
Weight: 143 kg
Layout: 12 rows, 4 slots on each row
Status Indication: LED
LED: 2 LEDs/slot
(Left light: Download/Test; Right light: Charge)
Connection Type: 3*USB 3.0, 3*USB 2.0
Power Supply: 100-240V AC, 50/60Hz
Max Consumption: 1920W
Working Humidity: 20%~90%RH, No condensing



IAU Battery Charging Rack

The IAU BCR-48 is a charging device designed for simultaneously charging 48 of the IAU-19.

Size(L×W×H): 650*320*1810 mm
Weight: 140 kg
Layout: 12 rows, 4 slots on each row
Status Indication: LED
Power Supply: 100-240V AC, 50/60Hz
Max Consumption: 1920W
Working Humidity: 20%~90%RH, No condensing

