



SIERRA<sup>®</sup> Summit<sup>™</sup>  
EMG • NCS • EP • ULTRASOUND

ULTRASOUND



# FUSING FORM AND FUNCTION

*Cadwell® is excited to introduce Sierra® Summit™ with ultrasound, a completely integrated electrodiagnostic and imaging solution. Perform an ultrasound without switching machines or even applications.*

## COMPLEMENT YOUR ELECTRODIAGNOSTIC TESTING

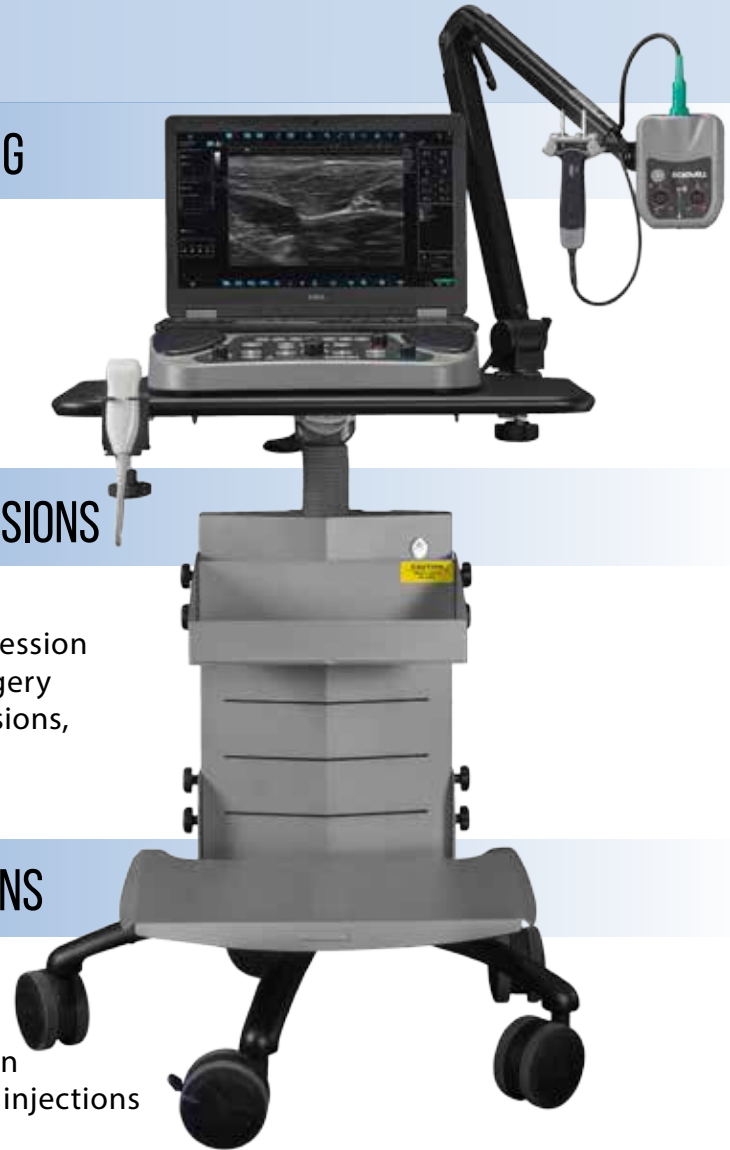
- Confirm electrodiagnostic findings
- Detect early stage nerve damage
- Provide insight into muscle functionality
- See how movement effects the nerve
- Study the nerve along its entire course

## IMPROVE YOUR DIAGNOSIS AND TREATMENT DECISIONS

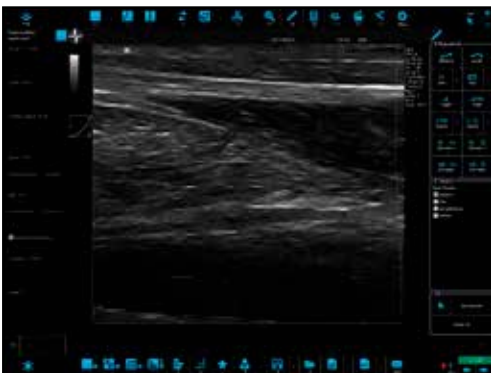
- Improve accuracy and specificity of a diagnosis
- Identify the site of involvement and origin of compression
- Determine the need and expected outcomes of surgery
- Detect additional evidence: cysts, lipomas, compressions, entrapments, tumors, traumas and causes of lesions

## AUGMENT YOUR NEEDLE GUIDANCE AND INJECTIONS

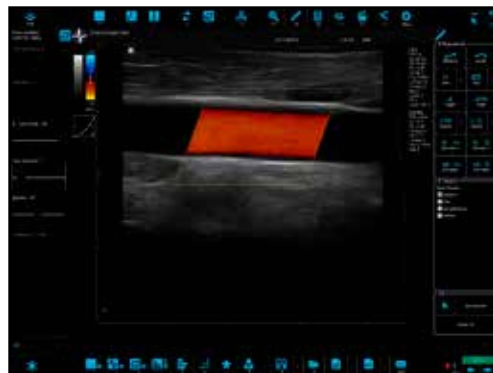
- Ensure the needle is inserted in the correct muscle
- See the location of the needle within the muscle
- Measure muscle functionality pre- and post-injection
- Simultaneously hear, see and stimulate for accurate injections



**Median Nerve and Tendon**



**Doppler**



**Median Transverse**



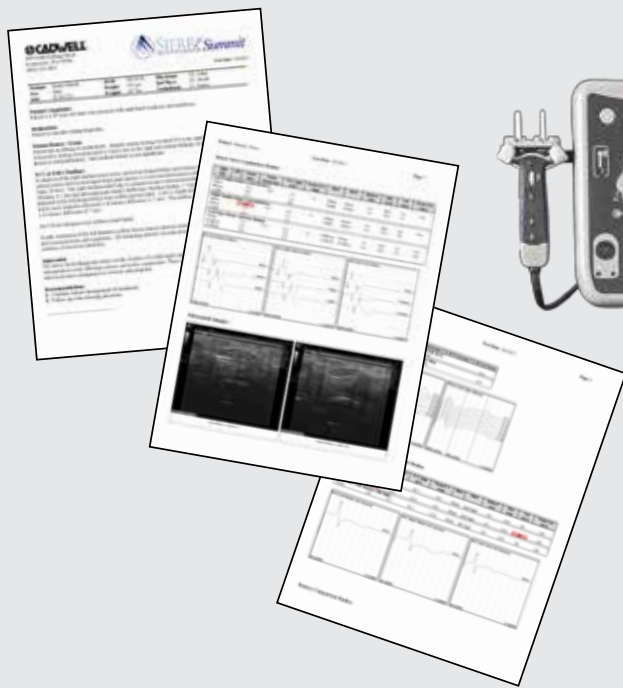
# *Full integration makes real-time imaging a natural part of the electrodiagnostic workflow.*

## **Integrated Controls**

Easily adjust focus, frequency, depth, power, gain, grayscale modes and playback with the Sierra® Base Unit.

## **Integrated Reports**

Include ultrasound images complete with measurements and annotations with your electrodiagnostic results.



## **Integrated Settings**

Pre-define ultrasound structures in the Sierra Summit™ with presets for depth, focus, frequency, gain and power to save time and improve clarity of specific structures.

## **Integrated Workflow**

Switch between ultrasound and EMG or NCS with the push of a button. Include ultrasound sites in your NCS and EMG Study Lists.



## **Concurrent Use**

Perform an ultrasound while simultaneously running volitional or stimulated EMG. Hear and Visualize while stimulating for more accurate injections and needle guidance.

# Ultrasound Options

Two ultrasound hardware solutions with a variety of probes make the Sierra® Summit EMG with integrated ultrasound affordable, flexible and functional.

The SmartUs is CE marked and is currently undergoing premarket review by FDA.

	MicrUs	SmartUs
<b>Description</b>	Pocket-sized, point of care, digital, black and white ultrasound diagnostic system	Color, doppler, digital, portable ultrasound diagnostic system
<b>Modes</b>	B, M, B+M, 4B, B+B, Spatial Compound, Trapezoid Imaging, B-Steer, Zoom	B, B+B, 4B, M, B+M, B-steer, Color Doppler, Power Doppler (PDI), Directional Power Doppler (DPDI), Continuous Wave (CW) Spectral Doppler, Pulsed Wave (PW) Spectral Doppler, High Pulse Repetition Frequency (HPRF), Duplex (B+PW/CW), Triplex (B+Color Doppler+PW/CW)
<b>Measurements</b>	Brightness (B): distance, length, area, circumference, volume, angle, stenosis % Motion (M): distance, time, velocity, heart rate, stenosis %	B-mode and M-mode: same as MicrUS PW-CW Spectral Doppler: velocity, PG, PR, RI, etc. PW Doppler automatic tracing and calculations
<b>Probes/ Transducers</b>	<p>6 - 15 MHz Linear, 25mm 5 - 12 MHz Linear, 40 mm</p> <p>Wide bandwidth, multifrequency Automatic transducer recognition 2 &gt; 31 cm scanning depth</p> 	<p>10 - 18 MHz Linear, 30mm 7.5 - 15 MHz Linear, 40mm 7.5 - 15 MHz Linear, 25mm <small>(Small footprint)</small></p> <p>Wide bandwidth, multifrequency Automatic transducer recognition</p> 
<b>Imaging</b>	Automatically adjust US image size to screen resolution. Full motion and full-size real-time US. Imaging up to 120 fps. Zoom from 60 - 600% in all modes	
<b>Save Formats</b>	AVI, JPG, BMP, PNG, TIF, XLSX, DCM, TPD, TVD	
<b>Software</b>	Echo Wave II (32/64-bit Windows)	
<b>Connections</b>	USB 2.0/3.0 power cable	12V power adapter
<b>Dimensions</b>	4.2W x 4.1D x 0.8H (inches); 0.44 lb 106W x 105D x 21H (mm); 0.2 kg	6.5W x 8.2D x 2.5H (inches); 4 lbs 165W x 210D x 62H (mm); 1.8 kg