RF Arrays and Coils

The RF architecture of the Signa HDx 1.5T scanner comes with a 4-quadrature channel design as standard or optional 8-channel configurations. The following coils are available with the Signa HDx 1.5T system to deliver high SNR and image quality using the optional high-density arrays shown here.

GE surface coils are developed to provide anatomical coverage without compromising image quality. Coverage is maintained while providing high-density arrays focused around the anatomy of interest to guarantee the highest image quality.

The scanner comes with a split-top, transmit/receive head coil as standard and optional coils shown here are available.

### HD Cardiac Array
- 4-channel, 4-element
- Receive-only coil
- 26 cm wide x 28 cm long coverage of the heart, mediastinum, and portions of the thorax. Designed to improve imaging of the heart and pulmonary vasculature.
- 11x12 in (29x31 cm)

### High Resolution Cardiac
Excellent depiction of the chambers using FIESTA and cardiac array.

### Quadrature Head Coil
- Transmit/receive single channel head coil
- High SNR and uniformity
- 30 cm S-I coverage
- 11x12 in (29x31 cm)

### HD Neurovascular Array
- 8-channel, 12-element phased array coil
- Optimized for parallel imaging
- 44 cm S-I coverage without repositioning patient or coil
- Optimized for parallel imaging
- Carotids, soft tissue, neck, cervical spine, brain
- 27x15x15 in (68x38x38 cm)

### HD Body Array
- 8-channel, 4-element
- Receive-only coil
- Optimized for parallel imaging techniques
- 26 cm coverage
- 30x22x22 in (76x56 cm)

### HD Torso Array
- 8-channel, 6-element
- Receive-only coil
- 54 cm wide x 52 cm long coverage of the chest, abdomen, and pelvis. Designed to improve imaging of the liver, kidneys, pancreas, adrenals, heart, pulmonary and abdominal vasculature.
- 20x10x18 in (51x25x46 cm)

### HD Breast Array
- 8-channel, 8 element phased array design
- Optimized for parallel imaging techniques
- Biopsy compatible for both medical and lateral approaches
- 20x10x18 in (51x25x46 cm)
- VIBRANT compatible
- Open design

### HD Body Array
- 8-channel, 6-element phased array coil
- Receive-only coil
- 54 cm wide x 52 cm long coverage of the chest, abdomen, and pelvis. Designed to improve imaging of the liver, kidneys, pancreas, adrenals, heart, pulmonary and abdominal vasculature.
- 20x10x18 in (51x25x46 cm)

### HD Neural Array
- 4-channel, 4-element
- VIBRANT compatible
- Parallel imaging compatible acceleration factors to 2x
- Open design
- Single and bilateral breast imaging with 20cm max FOV
- Compatible with biopsy device device (purchase separately)
- 17x18x8 in (43x46x21 cm)

### HD Portal Array
- 8-channel, 8 element phased array design
- Optimized for parallel imaging techniques
- Biopsy compatible for both medical and lateral approaches
- 20x10x18 in (51x25x46 cm)
- VIBRANT compatible
- Open design

### HD Torso Array
- 8-channel, 8-element phased array coil
- Receive-only coil
- 54 cm wide x 52 cm long coverage of the chest, abdomen, and pelvis. Designed to improve imaging of the liver, kidneys, pancreas, adrenals, heart, pulmonary and abdominal vasculature.
- 20x10x18 in (51x25x46 cm)

### HD Breast Array
- 8-channel, 8 element phased array design
- Optimized for parallel imaging techniques
- Biopsy compatible for both medical and lateral approaches
- 20x10x18 in (51x25x46 cm)
- VIBRANT compatible
- Open design

### HD TTL Array
- 8-channel, 13 element phased array design
- Optimized for parallel imaging
- Full 60 cm coverage
- 30x22x22 in (76x56 cm)
- Fixed in (41x17 cm)

### HD Body Array
- 8-channel, 12 element phased array design
- Optimized for parallel imaging
- 30x22x22 in (76x56 cm)
- Fixed in (41x17 cm)

### HD Torso Array
- 8-channel, 6 element
- Receive-only coil
- 54 cm wide x 52 cm long coverage of the chest, abdomen, and pelvis. Designed to improve imaging of the liver, kidneys, pancreas, adrenals, heart, pulmonary and abdominal vasculature.
- 20x10x18 in (51x25x46 cm)

### HD Breast Array
- 8-channel, 8 element phased array design
- Optimized for parallel imaging techniques
- Biopsy compatible for both medical and lateral approaches
- 20x10x18 in (51x25x46 cm)
- VIBRANT compatible
- Open design

### HD Breast Array
- 8-channel, 8 element phased array design
- Optimized for parallel imaging techniques
- Biopsy compatible for both medical and lateral approaches
- 20x10x18 in (51x25x46 cm)
- VIBRANT compatible
- Open design

### HD Body Array
- 8-channel, 4-element
- Receive-only coil
- Optimized for parallel imaging techniques
- 26 cm coverage
- 30x22x22 in (76x56 cm)

### HD Portal Array
- 8-channel, 8-element phased array coil
- Receive-only coil
- 54 cm wide x 52 cm long coverage of the chest, abdomen, and pelvis. Designed to improve imaging of the liver, kidneys, pancreas, adrenals, heart, pulmonary and abdominal vasculature.
- 20x10x18 in (51x25x46 cm)
**HD Wrist Array**
- 6-channel, 6-element
- Flat design for easy imaging
- Off-center design for high resolution
- Improved SNR and uniformity

**HD Shoulder Array**
- 3-channel, 3-element phased-array design
- Optimized for off-center imaging
- Homogenous imaging FOV and robust fat suppression
- PURE compatible

**Musculoskeletal**

**Quad/Extremity Knee/Foot**
- Transmit/receive single-channel multi-purpose coil
- High SNR and uniformity
- Free-standing

**General Purpose Surface Coils**
- Single element receive-only coils
- 7.5 cm (3 in) and 12.5 cm (5 in) diameter loops
- Optional dual-array package includes positioning device, two 7.5 cm (3 in) coils, and coil combiner for high resolution, bilateral imaging
- High SNR over small FOV

**GP Flex Coil**
- Receive-only
- Multi-purpose coil
- Flexible positioning

**GE Healthcare**

**GE Healthcare Waukesha, WI 53186 U.S.A.**

**www.gehealthcare.com**

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**Signa HDe 1.5T RF Coils**

**HD Wrist Array**
- 6-channel, 6-element phased-array design
- Superior off-center imaging with the quadrature knee and foot coil

**HD Shoulder Array**
- 3-channel, 3-element phased-array design
- Optimized for off-center imaging
- Homogenous imaging FOV and robust fat saturation
- PURE compatible

**High Resolution Wrist**
- High definition imaging acquired off center at the patient's side with the wrist array in this 10x10 cm FOV.

**Quad/Extremity Knee/Foot**
- Transmit/receive single-channel multi-purpose coil
- High SNR and uniformity
- Free-standing

**General Purpose Surface Coils**
- Single element receive-only coils
- 7.5 cm (3 in) and 12.5 cm (5 in) diameter loops
- Optional dual-array package includes positioning device, two 7.5 cm (3 in) coils, and coil combiner for high resolution, bilateral imaging
- High SNR over small FOV

**GP Flex Coil**
- Receive-only
- Multi-purpose coil
- Flexible positioning

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