### Your trusted device with......

# Precise energy delivery for faster transections and reduced heat exposure<sup>1-3\*</sup>



\*Comparison vs ACE<sup>TM</sup>+7. Comparison of median transection time via Mann-Whitney analysis. P-value p<0.001. Transections performed at Power Level 5 on full bite excised porcine Jejunum. 45cm shaft length.

## HARMONIC<sup>™</sup> 700 Shears with Advanced Hemostasis

Replaces the HARMONIC™ ACE™+7



#### HARMONIC™ technology, a leader in advanced energy with more than 33 million procedures worldwide.6\*

#### **Improved Adaptive Tissue Technology**



HARMONIC™ 700 Shears actively controls blade temperature<sup>1,7δ</sup>



Delivers precise energy to tissue to minimize thermal footprint,1,3# 5.57% lower mean peak blade temperature vs HARMONIC™ ACE™+7 Shears¹,7¶ and had 31.35% faster vessel transection vs HARMONIC™ ACE™+7 shears<sup>2Ω</sup>

#### **Better performance**

92.7% less

tissue sticking than ACE+78t

vessel transections vs HARMONIC™ ACE™+7

#### 7mm diameter

Vessel sealing for vessels up to and including 7mm diameter using the Advanced Hemostasis button<sup>1,9\*\*</sup>

#### Enhanced tissue protection<sup>1,7,8,10,110</sup>



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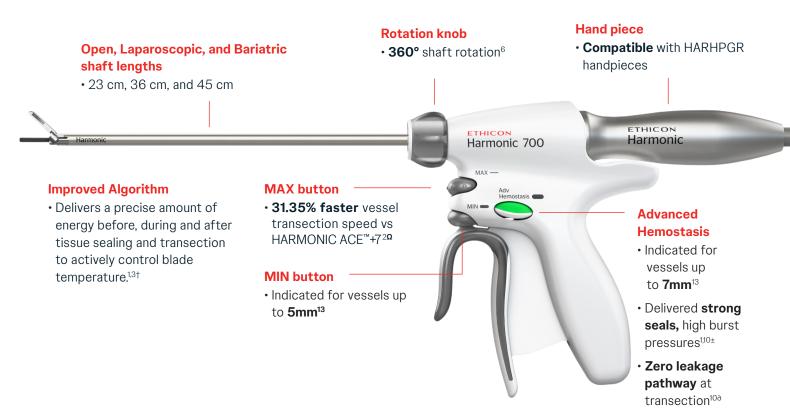
5.57% Lower mean peak blade temperature vs HARMONIC™ ACE™+7 Shears¹,7¶



\*Global sales data and market share & insights for HARMONIC<sup>TM</sup> as of October 2021 #Improved Advanced Tissue Technology algorithm vs algorithm used in ACE<sup>TM</sup>+7 ±Compared to ACE<sup>TM</sup>+7. Improved Adaptive Tissue Technology algorithm was improved vs predicate ACE<sup>TM</sup>+7 algorithm. Tested using simulated tissue during marching tip transections simulating sustained use aComparison of median transection time via Mann-Whitney analysis. p-value p<0.001. Transections performed at Power Level 5 on full bite excised porcine dejunum.45cm shaft length. Preclinical test data are not necessarily indicative of clinical performance †p<0.001 comparison of ACE+7 to HARMONIC™ 700, In Vivo porcine carotid. Based on pre-clinical testing on animal models and clinical effect is unknown almproved Adaptive Tissue Technology algorithm vs Algorithm in ACE™+7 ‡HAR736 tested in vivo, porcine carotid. MAX mode at power level 5 used for vessels up to 2mm in diameter. MIN mode at power level 3 used for vessels larger than 2mm up to 5mm in diameter. Measured via histopathology. Based on pre-clinical testing on animal models and clinical effect is unknown  $\P p < 0.001$  using simulated tissue media in distal 1/3 of jaw. Using mean of peak temperatures after system achieved steady state temperature with repeated, extended activations. Percentage calculated relative to 0° C. Adaptive Tissue Technology improved over algorithm in ACE™+7. Pre-clinical test data are not necessarily indicative of clinical performance \*\*7mm seal only when using the Advanced Hemostasis button. **ŏ**Versus HARMONIC™ ACE+7

#### HARMONIC™ 700 SHEARS WITH ADVANCED HEMOSTASIS

## Precise energy delivery.<sup>1</sup> Improved versatility.<sup>1</sup>





Indicated for sealing vessels up to and including 7mm in diameter<sup>14</sup>



#### Tissue pad

• 5x better tissue pad life than ACE™+7 Shears¹,3,9‡

#### Curved, tapered blade

- 92.7% less tissue sticking vs HARMONIC ACE™+7<sup>7¥</sup>
- 5.57% lower mean peak blade temperature vs HARMONIC™ ACE™+7 Shears¹³∞

\*Compared to ACE+7 and devices with older versions of Adaptive Tissue Technology. Adaptive Tissue Technology improved over algorithm in ACE+7. Pre-clinical test data are not necessarily indicative of clinical performance †Improved Advanced Tissue Technology algorithm vs algorithm used in ACE™+7 ΩComparison of median transection time via Mann-Whitney analysis. p-value p<0.001. Transections performed at Power Level 5 on full bite excised porcine Jejunum.45cm shaft length. Pre-clinical test data are not necessarily indicative of clinical performance ±Sealing of ex vivo 5-7mm diameter porcine vessels showed median burst pressure of >1800 mmHg. Adaptive Tissue Technology improved vs ACE™+7 algorithm. Pre-clinical test data are not necessarily indicative of exciving repeated, extended activations on porcine jejunum. Adaptive Tissue Technology improved vs ACE™+7 algorithm. Pre-clinical test data are not necessarily indicative of clinical performance ¥p<0.001 comparison of ACE+7 to HARMONIC™ 700, In Vivo porcine carotid. Based on pre-clinical testing on animal models and clinical effect is unknown ∞p<0.001 using simulated tissue media in distal 1/3 of jaw. Using mean of peak temperatures after system achieved steady state temperature with repeated, extended activations. Percentage calculated relative to 0° C. Adaptive Tissue Technology improved over algorithm in ACE™+7. Pre-clinical test data are not necessarily indicative of clinical performance

## ELEVATING THE ART OF PRECISION FOR 30 YEARS

#### **HARMONIC**<sup>™</sup> Portfolio

	HARMONIC 1100	HARMONIC™ 700	HARMONIC™ ACE™+	HARMONIC™ FOCUS™+ Family
Surgical Application	Ideal for dissection to help you overcome your toughest challenges	ldeal for a variety of surgical procedures	Ideal for non- complex procedures without large vessels	ldeal for most open procedures in the upper body
Vessel Sealing	Coagulation of vessels up to and including 7 mm in diameter, using the Advanced Hemostasis hand control button. <sup>14</sup>	Coagulation of vessels up to and including 7 mm in diameter, using the Advanced Hemostasis hand control button. <sup>13</sup>	Coagulation of vessels up to and including 5 mm <sup>15</sup>	Coagulation of vessels up to and including 5 mm <sup>16</sup>
Blade Design	Longest ultrasonic blade on the market to capture large vessels and tissue bundles prior to transection <sup>17-19</sup> *	Coated curved blade <sup>13</sup>	Coated curved blade <sup>15</sup>	Slim blade design
Smart Energy Delivery <sup>20†</sup>	Improved Adaptive Tissue Technology <sup>21±</sup>	Improved Adaptive Tissue Technology <sup>1,7±</sup>	Adaptive Tissue Technology	Adaptive Tissue Technology
Sizes	20 cm, 36 cm	23 cm, 36 cm, 45 cm	23 cm, 36 cm	9 cm, 17 cm
Handpiece	None required	HARHPGR	HARHPGR	HARHPBL

Through great surgical precision, HARMONIC™ continues to enable smart energy delivery and versatility in sealing and dissection¹

<sup>\*</sup>Device measurements based on a 2016 metrology study (median cut length 18.87mm vs. 14.80mm for Sonicision<sup>TM</sup> SCDA39 and 16.90mm for THUNDERBEAT Type S)  $\pm$ Compared to previous generations of HARMONIC<sup>TM</sup> devices

### **Ordering information**

Ethicon code	Product name	Description	
HAR1120	HARMONIC™ 1100 Shears with Advanced Hemostasis	Ultrasonic shears 5mm diameter 20 cm shaft length	
HAR1136	HARMONIC™ 1100 Shears with Advanced Hemostasis	Ultrasonic shears 5mm diameter 36 cm shaft length	
HAR723	HARMONIC™ 700 Shears with Advanced Hemostasis	Ultrasonic shears 5mm diameter 23 cm shaft length	
HAR736	HARMONIC™ 700 Shears with Advanced Hemostasis	Ultrasonic shears 5mm diameter 36 cm shaft length	
HAR745	HARMONIC™ 700 Shears with Advanced Hemostasis	Ultrasonic shears 5mm diameter 45 cm shaft length	
HAR23	HARMONIC™ ACE™+ Shears	Ultrasonic shears 5mm diameter 23 cm shaft length	
HAR36	HARMONIC™ ACE™+ Shears	Ultrasonic shears 5mm diameter 36 cm shaft length	
HAR9F	HARMONIC™ FOCUS™+ Shears	Ultrasonic shears 9 cm shaft length	
HAR17F	HARMONIC™ FOCUS™+ Long Shears	Ultrasonic shears 17 cm shaft length	
GEN11	ETHICON GEN11 Generator	Generator compatible with all HARMONIC™ and ENSEAL™ devices	
FSW11	ETHICON Generator Accessories	Foot switch and cable	
HARHPGR	HARMONIC™ Gray Hand Piece	Compatible with HAR723, HAR736, HAR745, HAR23, HAR3	
HARHPBL	HARMONIC™ Blue Hand Piece	Compatible with HAR9F, HAR17F, SNGCB, SNGHK, SNGHK2	

## Smart energy delivery<sup>20\*</sup> Improved versatility.<sup>1</sup>

- Improved Adaptive
  Tissue Technology
  algorithm<sup>3,5†</sup>
- Better performance<sup>2,8±Ω</sup>
- Enhanced tissue protection<sup>1,7,8,10,11††</sup>





\*Compared to previous generations of HARMONIC™ devices †Improved Advanced Tissue
Technology algorithm vs algorithm used in ACE™+7 ±p<0.001 comparison of ACE+7 to HARMONIC™ 700, In Vivo porcine carotid.
Based on pre-clinical testing on animal models and clinical effect is unknown ΩComparison of median transection time via Mann-Whitney analysis, p-value p<0.001. Transections performed at Power Level 5 on full bite excised porcine Jejunum.45cm shaft length.
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References: 1. Ethicon, 500951334, Harmonic 700 (HAR723, HAR736, and HAR745) Claims Rationale, April 2022, Data on File 2. Ethicon, 500898990A, Gemini Claims Testing – Transection Speed, March 2022, Data on File 3. Ethicon, 501068549A Thermal Protection Memo, Aug 2022, Data on File 4. Ethicon Harmonic 700 (HAR723, HAR736, and HAR745) Claims Rationale.16/05/2022. Windchill document #500951334A 5. Ethicon Project Gemini - Draft thermal protection memo, 03/09/2022. Windchill document #501068549A 6. Ethicon, 01102021, ETHICON Energy Historical Units, Oct 2021, Data on File 7. Ethicon, 500774462A Gemini Claims Testing − Distal Shaft, Clamp Arm, Blade Temp, July 2021, Data on File 8. Ethicon, 501001842A, Gemini Claims Rationale, May 2022, Data on File 9. As Per Instructions For Use 10. Ethicon, 500648351A, Gemini Claims Testing − Burst Pressure/Sealing, Nov 2021, Data on File 11. Ethicon, 500660295B, Gemini Claims Testing − General Design Intent, Feb 2021, Data on File 12. Ethicon, PRE 21-0117, project GEMINI: hemostasis and thermal spread study of HARMONIC™ 700 laparoscopic shears (HAR736) compared to Sonicision curved jaw (scda39) and to Thunderbeat Type S (TB-0535FCS) in an acute porcine model, June 2022, Data on File 13. HARMONIC™ 700, 5mm Diameter Shears with Advanced Hemostasis Instructions For Use 14. HARMONIC™ 1100 Shears Instructions For Use 15. HARMONIC™ ACE+ Shears Instructions For Use 16. HARMONIC™ FOCUS+ Shears Instructions For Use 17. Ethicon, PRC074607A, Buccaneer Metrology Claims, March 2016, Data on File 18. thicon, PSP004867A, Project Buccaneer HARMONIC® HD 1000i Laparoscopic Shears (HARHD36): Design Verification Chronic (30 day) Survival Study in the Pig, March 2016, Data on File 19. Ethicon, PRC095370C, Project Scarlet: Blade Temperature, May 2020, Data on File 21. Ethicon Project Scarlet: Blade Temperature, 20/04/2021. Windchill Document #PRC095370E

Please refer always to the Instructions for Use / Package Insert that come with the device for the most current and complete instructions.

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