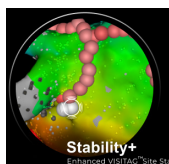
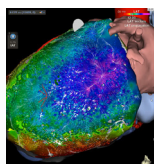


Efficiency at Heart. Excellence at Hand.^{1-5*}

Stability+



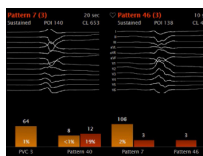
Local Velocity
Vectors



CARTO™ 3
System

BASE

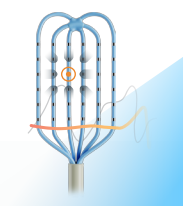
Automatic
Pattern
Acquisition
(APA)



Enhanced
CONFIDENSE™

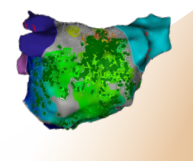


Multipolar
Mapping

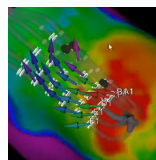


CARTO ELEVATE™
Module

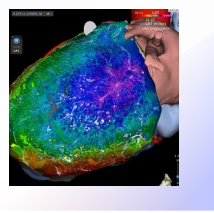
Complex
Signal
identification



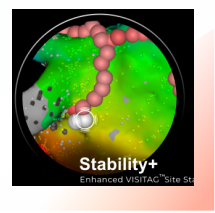
Local
Conduction
Vector



*When using multipol
DO NOT use OPTRELL™ Mapping Catheter with
TRUEref™ Technology in patients with prosthetic
valves.



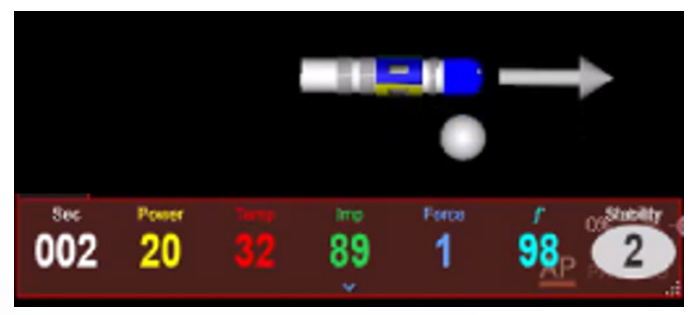
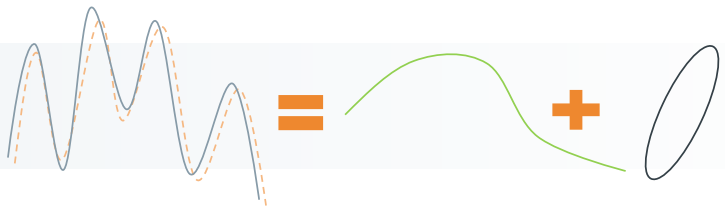
Local Velocity Vectors



Stability+

Stability+

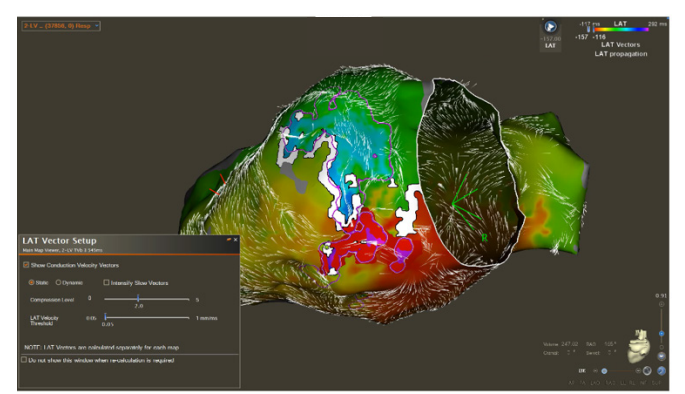
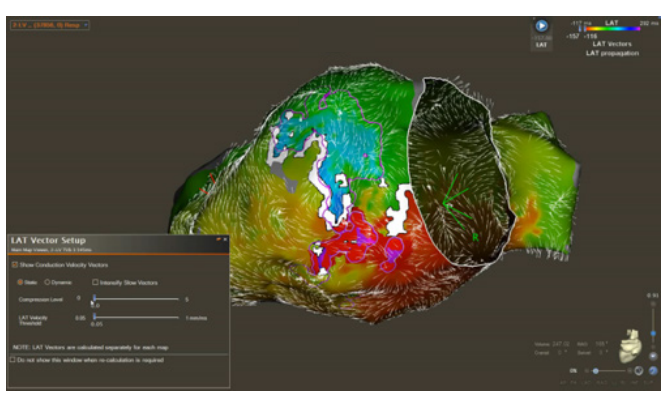
- Improved support for Short Duration Ablation
- CARTO VISITAG™ Module algorithm allows now for catheter motion to be decomposed to respiration vs. catheter motion in the chamber



White tag and Tag Index appear within 2 seconds from ablation start.

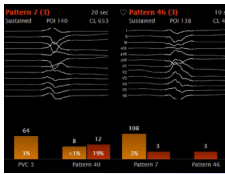
Local Velocity Vectors

- Local conduction velocity vectors are calculated to help identify areas of acceleration or deceleration of the wave
- Correlated with LAT and voltage maps, can potentially help identify the ventricular critical isthmus
- Local conduction velocity vectors can be displayed compressed to visually emphasize the main direction of the wave



CARTO ELEVATE™

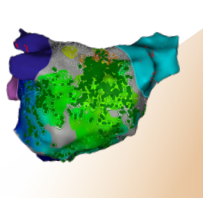
Module



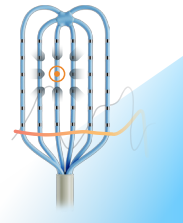
Automatic Pattern Acquisition (APA)



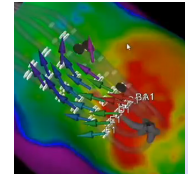
Enhanced CONFIDENSE™



Complex Signal Identification



Multipolar Mapping



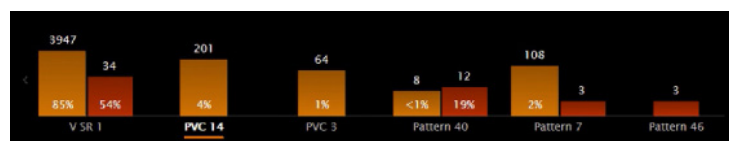
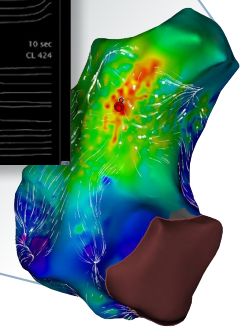
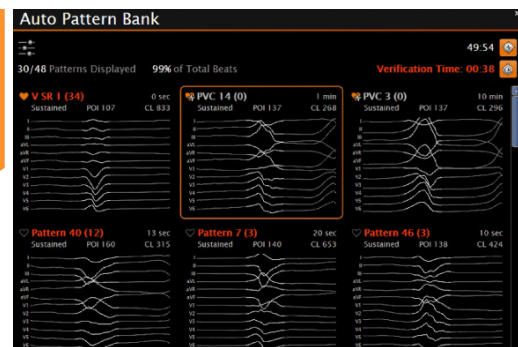
Local Conduction Vector

Automatic Pattern Acquisition (APA)

APA highlights the most prevalent premature ventricular morphology, driving a more informed decision on the preferred PVC to map.*

APA allows the physician to track and seamlessly manage multiple morphologies during an EP procedure.**

- Automatically analyzes the burden rate of each abnormal pattern as soon as the patient is connected to the CARTO™ 3 System.



Verification mode helps to track arrhythmia burden post ablation without the need to continuously track the patient ECG/EGM.**

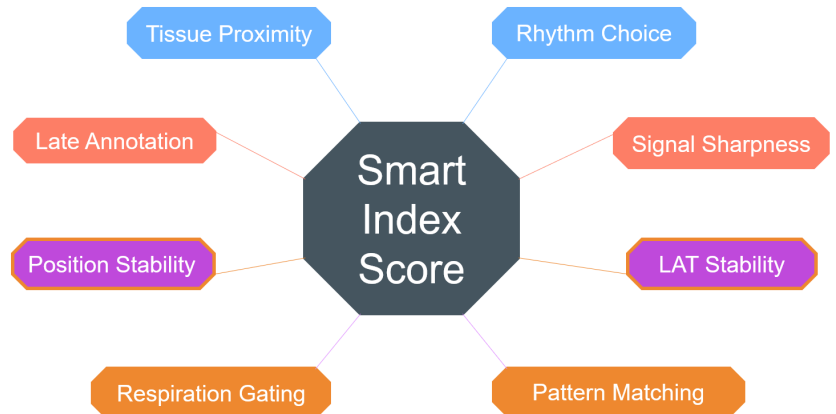
*A more informed decision is driven by the burden analysis showing statistical information about the patient's arrhythmia pre and post ablation.

**Burden analysis refers to the ECG/EGM recorded and analyzed by the system throughout set up and procedure start, pre and post ablation.

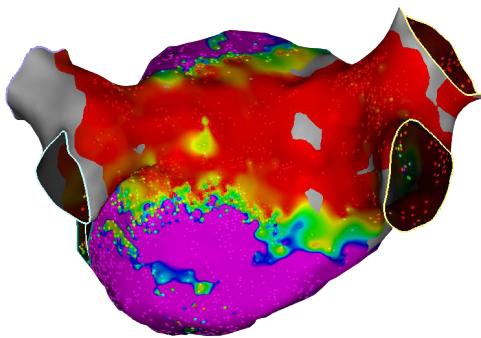
Enhanced CONFIDENSE™ Module



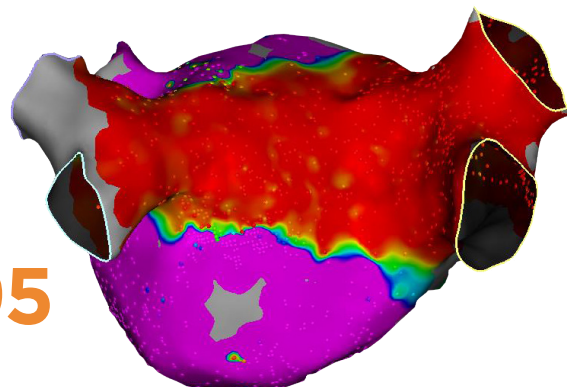
- The system automatically applies weighting factors to each parameter to calculate the overall Smart Index Score



- Swap existing points with new higher quality points
- Smart Index visualization slider allows to control coloring of the map based on the quality of the points



Smart Index = **0.4**



Smart Index = **0.95**

Intelligent Mapping Made Simple.

Complex Signal Identification

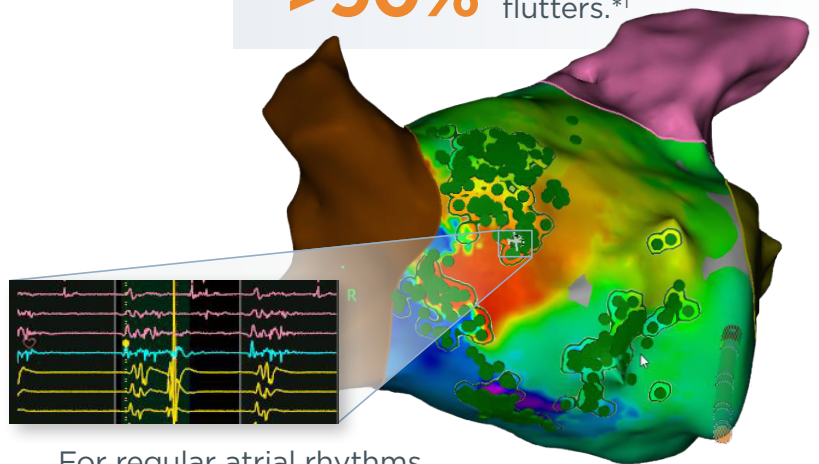
- A machine learning based algorithm automatically acquires and auto-tags Fractionated Potentials with a unique green tag
- The user controls the display of the automatically acquired complex points based on:
 - Minimum Fractionation Score
 - Time Frame within WOI (ms)
 - Bipolar amplitude Range (mV)
 - Min duration (% of CL/ms)

81.5%

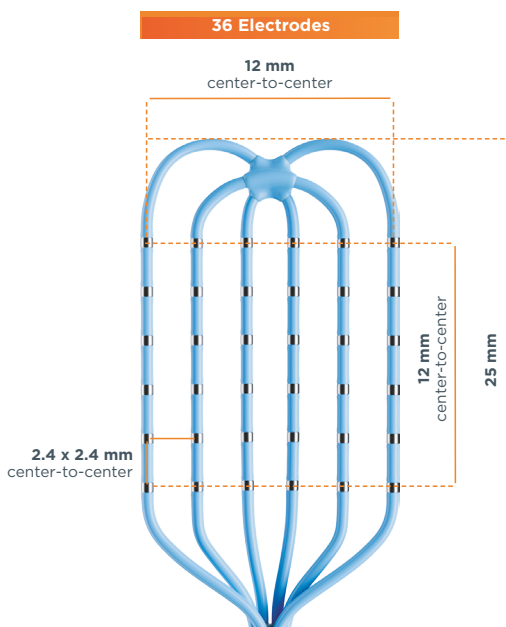
positive predictive value to identify area of fractionations¹

Complex Signals Identification may provide automatic detection of the area of fractionation at the critical isthmus in more than

>90% of atypical atrial flutters.*¹



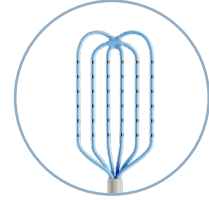
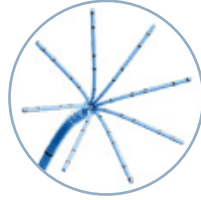
OPTRELL™ Mapping Catheter with TRUeref™ Technology



- 460µm electrodes
- Bi-Directional Tip (D-F, F-J Curves)
- TRUeref™ Technology Tightly Referenced Unipolar Electrode



*Based on a single center retrospective study (n=27) where application of new tool identified in 91% of the cases. DO NOT use OPTRELL™ Mapping Catheter with TRUeref™ Technology in patients with prosthetic valves.



**BWI OCTARAY™
Mapping Catheter**

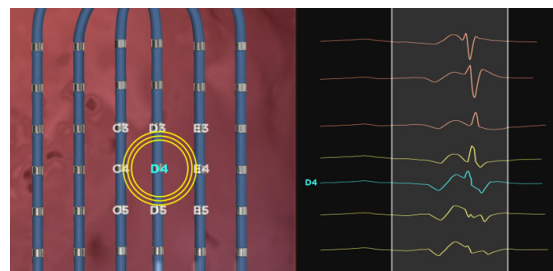
**BWI OPTRELL™ Mapping
Catheter Small⁶**

Feature	BWI OCTARAY™ Mapping Catheter	BWI OPTRELL™ Mapping Catheter Small ⁶
Sensor-enabled	Yes	Yes
Shape	Splines	Grid pattern
Number of Electrodes for EA Data Collection	48	36
Electrode Spacing	2-2-2-2-2mm, 2-5-2-5-2mm, 3-3-3-3-3mm	2.4mm (center-to-center)
Electrode Length¹	0.46mm	0.46mm
French Size	8 Fr Shaft 2 Fr Splines	8 FR Shaft 2 FR Splines
Curves/Deflection	D or F Uni-directional	D-F or F-J Bi-directional
Dimensions	-	12mm W x 25mm H
Max Coverage Area	7.1cm ² (standard splines) 12.7cm ² (Long splines)	1.44cm ²

Complex Made Simple.

Multipolar

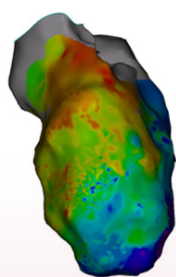
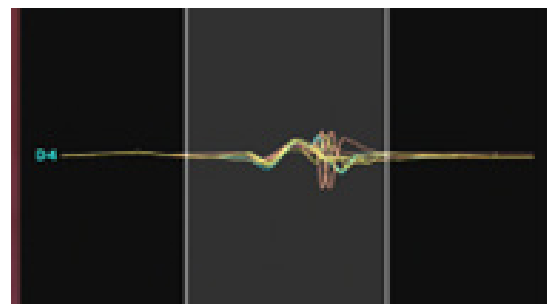
Localized Unipolar signals with reduced far field and improved annotation accuracy.



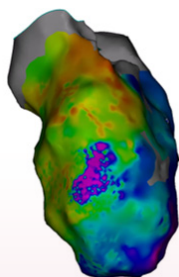
The Multipolar Mapping algorithm analyzes signals from multiple neighboring electrodes of the OPTRELL™ Mapping Catheter, identifying common far field components and removing them from the unipolar signal. You can display the Multipolar channels and select them for mapping.⁷



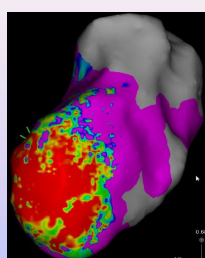
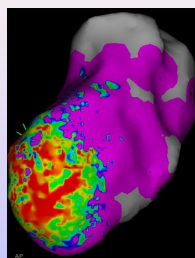
95%
accurate annotation^{6*}



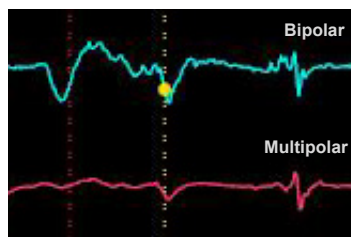
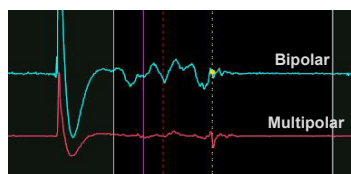
Wavefront



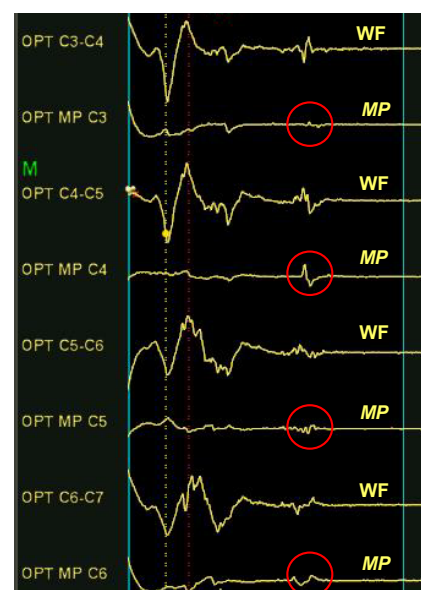
MULTIPOLAR



Far Field Removal using Multipolar results in an accurate local activation and annotation.



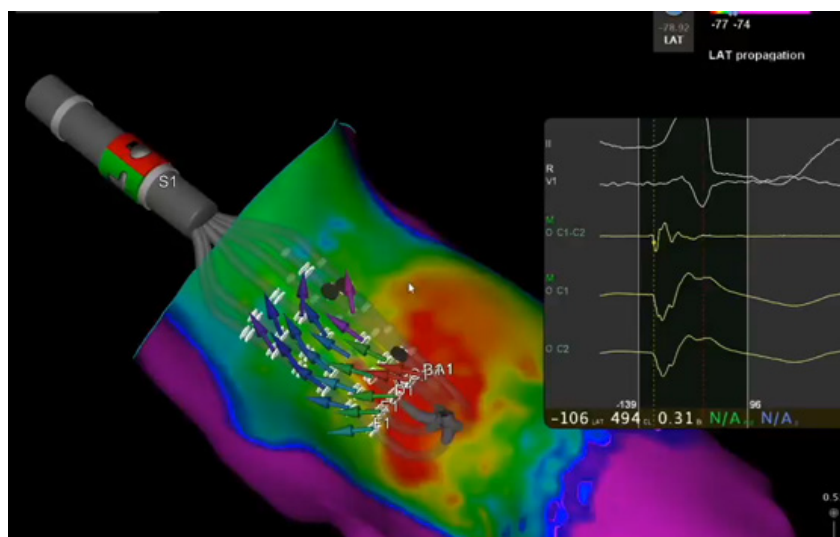
Multipolar measurement captures the local voltage.



*when using OPTRELL™ Mapping Catheter with CARTO™ 3 System V8
DO NOT use OPTRELL™ Mapping Catheter with TRUEref™ Technology in patients with prosthetic valves.

OPTRELL™ Mapping Catheter and Local Conduction vectors

2x better differentiation between conduction block, slow conduction or wavefront collision vs conventional LAT mapping^{7*}



Direction, velocity and activation integrated in one vector

Kit Code	Kit Name
KT5400600	CARTO™ 3 V8 Upgrade Kit
KT5400655	CARTO ELEVATE™ Module V8 Kit
KT5400680	CARTOSOUND™ FAM Module V8 Kit
KT5400650	CARTO™ LAM Module V8 Kit
KT5400620	VISITAG SURPOINT™ V8 Module Kit
KT5400645	OPTRELL™-36 SP V8 Kit

*compared to standard mapping.

1. Franco E. Automatic identification of areas with low-voltage fragmented electrograms for the detection of the critical isthmus of atypical atrial flutters. J Cardiovasc Electrophysiol. 2023 Feb;34(2):356-365.
2. REP16525 - CARTO 3 V8 SMARTMAP POD Report
3. REP15093 - CARTO 3 V8 Validation plan for MULTIPOLAR
4. REP15094 - CARTO 3 V8 Clinical Validation for MULTIPOLAR Clinical Validation Report
5. REP13040 Fractionated Signals Identification POD Report
6. Anter, E. Et al. Multipolar Electrograms A New Configuration That Increases the Measurement Accuracy of Intracardiac Signals. JACC. 2024. doi.org/10.1016/j.jacep.2024.04.009
7. Yavin HD, Bubar ZP, Higuchi K, Sroubek J, Yarnitsky J, Anter E. Propagation Vectors Facilitate Differentiation Between Conduction Block, Slow Conduction, and Wavefront Collision. Circ Arrhythm Electrophysiol. 2021 Aug;14(8):e010081

Important information:

Prior to use, refer to the instructions for use supplied with this device for indications, contraindications, side effects, warnings and precautions.

This presentation is not intended for distribution outside of the EMEA region.

The CARTO VISITAG™ Module provides access to data collected during the application of RF energy. The data does not indicate the effectiveness of RF energy application.

These screenshots provide examples of parameters that are not intended as recommendations. All settings are user defined and must be based on clinical experience and medical judgment.

EM_BWL_DIAG_387421

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