

QDOT MICRO™

Catheter

A Smarter
Ablation in
a Fraction
of the Time^{1*}

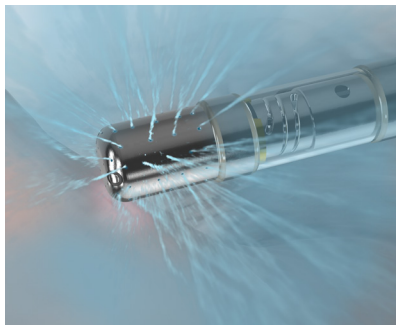


*Shorter procedure, fluoro, and RF application times and less irrigation fluid load when compared to conventional ablation with RF catheters

What's QDOT MICRO™ Catheter?

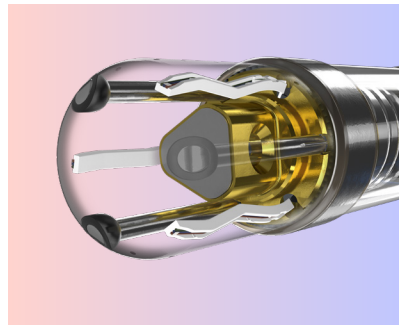
The Next Generation Ablation Catheter

- Consistent Lesion Creation²⁺
- Advanced Diagnostics



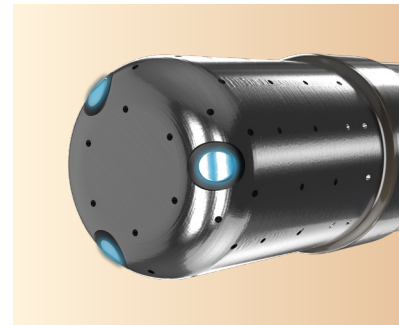
Optimized Irrigation

Irrigation rate varies automatically for optimized power delivery, ensuring the tip is within the allowed target temperature range.¹



Improved Temperature Monitoring

Temperature sensitivity that enables temperature control on an irrigated catheter with the addition of 6 thermocouples embedded into the tip.



Higher Signal Resolution

QDOT MICRO™ Catheter includes 3 microelectrodes providing high resolution electrograms and discrete local signals.^{4#}



Advanced Ablation

With QMODE+™ temperature control, the generator delivers the high RF energy at the set power for the set short duration or until the target temperature is reached.

⁺Based on pre-clinical data.

^{*}When compared to THERMOCOOL SMARTTOUCH™ Catheter and THERMOCOOL SMARTTOUCH™ SF Catheter

[#] Pre-clinical test data are not necessarily indicative of clinical performance.

QMODE: Optimized Irrigation

Optimized Irrigation Provides More Consistent Ablations

With QMODE™, irrigation and power are automatically controlled using temperature feedback to maintain the tip at an allowed target temperature range while avoiding over-heating.^{3*}

QMODE™ maximizes the power delivery by modulating the irrigation flow without exceeding the set target temperature.**

Get in the Flow with Greater Control

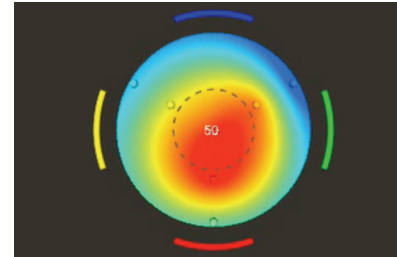
- Reduced Irrigation Flow
- Improved Proximal Irrigation**
- Irrigation Varies Automatically to Ensure Tip Remains within Its Target Temperature Range.

^{*}When compared to THERMOCOOL SMARTTOUCH™ Catheter and THERMOCOOL SMARTTOUCH™ SF Catheter

^{**} When compared to THERMOCOOL SMARTTOUCH™ Catheter and THERMOCOOL SMARTTOUCH™ SF Catheter and non-irrigate catheters.

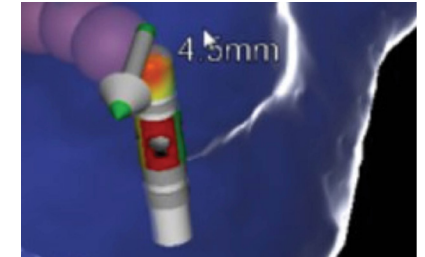
The Bullseye Interface

The bullseye tip display provides instantaneous feedback of ablation, in addition to stability.



Intuitive Orientation Indicators

Force vector along with indication from tip display, as well as bullseye display visually confirms orientation.**



Improved Temperature Monitoring

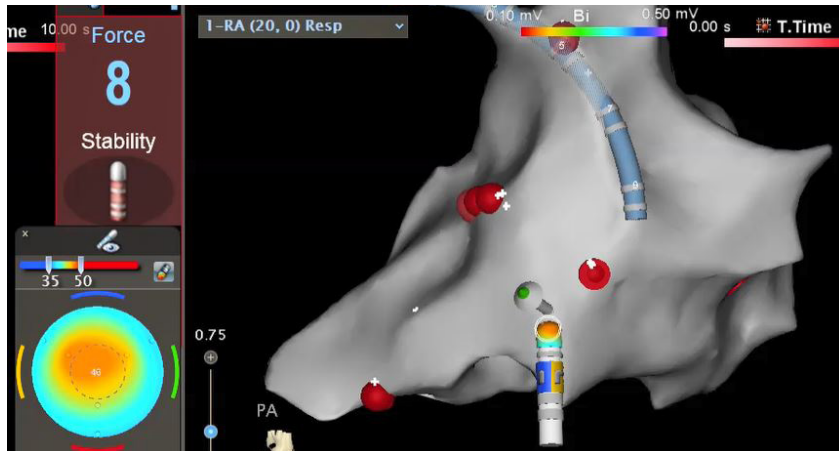
Stability You Can Count On

Seamless Integration with CARTO SMARTTOUCH™ contact force Technology***.

Thermocouple placement in close proximity to the tissue interface allowing a detailed temperature feedback system.

- Higher Temperature Sensitivity
- Enables Temperature Control on an Irrigated Catheter
- Real Time Catheter/Tissue Stability and Orientation Indication

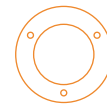
Real-time Stability and Orientation



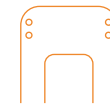
*** Natale A, Reddy V, Monir G, et al. Paroxysmal AF catheter ablation with a contact force sensing catheter: results of the prospective, multi-center SMART-AF trial. J Am Coll Cardiol. 2014;64(7):647-656.

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The QDOT MICRO™ Unique Thermocouple Design



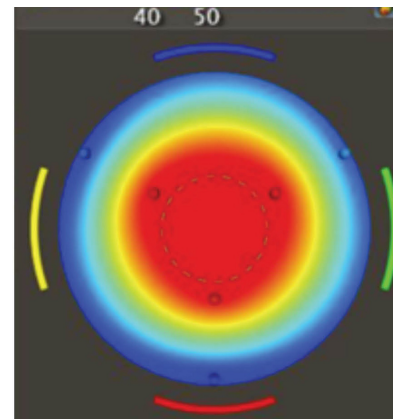
QDOT MICRO™ Catheter, with its 6 thermocouples, improves temperature sensitivity that allows real-time temperature map display.*



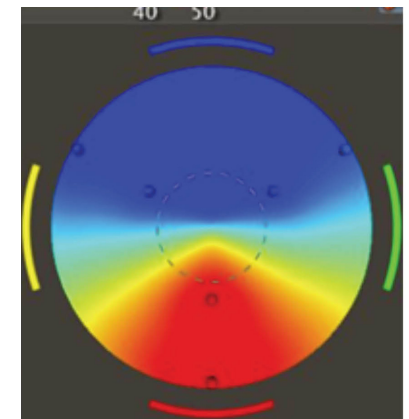
Thermocouples are in close proximity to tissue interface which allows for temperature feedback from tissue heating.

2D View for Different Tip Orientations During Ablation

The placement of the integrated thermocouples enabled improved temperature monitoring visualized through the tip and bullseye temperature displays.



Perpendicular

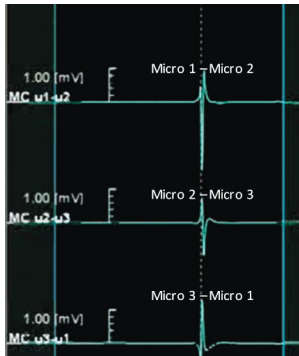


Parallel

Higher Signal Resolution

[In]formation You Can Count On

QDOT MICRO™ enhances substrate mapping capabilities by delineating more accurately the border zone between scar and healthy tissue (smaller area), including identification of channels within the scar tissue.



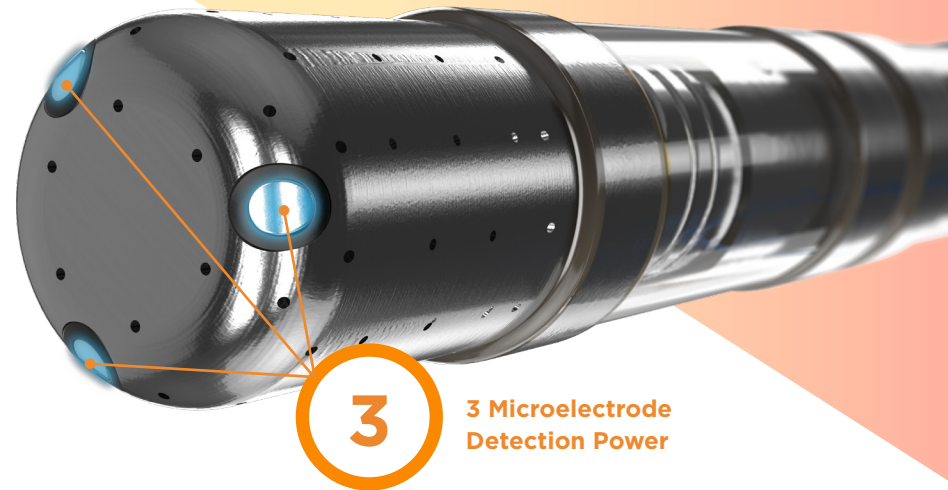
3 Microelectrodes Empower Information

QDOT MICRO™ Catheter includes 3 microelectrodes providing high-resolution electrograms and discrete local signals.^{4#}

Rich, detailed signal detection and enhanced user interface

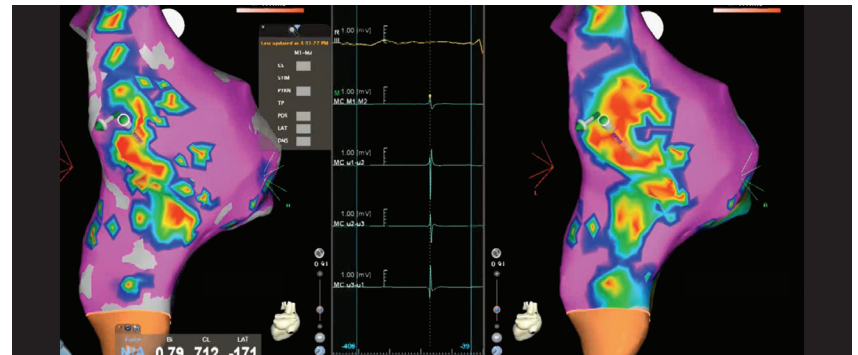
- 3 Distal Microelectrodes 1.5 mm apart
- High-Resolution Electrogram Imaging and Discrete Signal Detection
- Effectively Characterizes Border Between Scar and Healthy Tissue

Pre-clinical test data are not necessarily indicative of clinical performance.



High Resolution Mapping

Microelectrodes signals are used to create new type of voltage map based on the bipolar voltages of the microelectrodes.



Microelectrode Map

Bi-Polar Map (M1-M2)

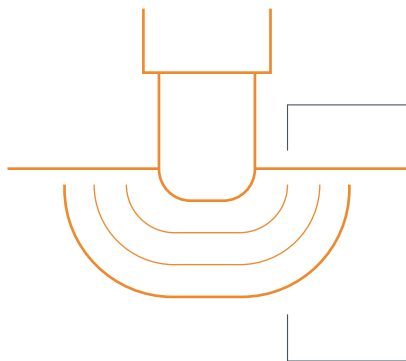
QMODE+™: Advanced Ablation

Smarter Ablations In a Fraction of the Time^{1*}

Temperature-controlled QMODE+™ resulted in transmural, consistently wider and more continuous lesions than conventional ablation.²

Resistive Heating vs. Conductive

RF lesion formation results from two thermal heating phases; resistive and conductive heating.⁵



Resistive heating of tissue occurs near the contact point.

Conductive heating exchange into tissue occurs away from heat source.



High Power,
Short Duration
Energy Delivery
You Can Count On

90 Watts, 4 seconds

It's the Only Time You'll Need

*Shorter procedure, fluoro, and RF application times and less irrigation fluid load when compared to conventional ablation with RF catheters

QDOT MICRO™ Delivers Smarter Ablations in a Fraction of the Time!^{1*}

Ordering Information

Bi-directional with curve visualization

Ordering #	Curve type	French size	Electrode tip (mm)	Length (cm)
D139501	DD	8	3.5	115
D139502	FF	8	3.5	115
D139503	JJ	8	3.5	115
D139504	FJ	8	3.5	115
D139505	DF	8	3.5	115

Uni-directional with curve visualization

Ordering #	Curve type	French size	Electrode tip (mm)	Length (cm)
D139401	D	8	3.5	115
D139402	F	8	3.5	115
D139403	J	8	3.5	115

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1. Reddy VY, Grimaldi M, De Potter T, Vijgen JM, Bulava A, Duytschaever MF, Martinek M, Natale A, Knecht S, Neuzil P, Pürerfellner H, Pulmonary Vein Isolation with Very High Power-Short Duration Temperature-Controlled Lesions: The First-in-Human QDOT-FAST Multicenter Trial, JACC: Clinical Electrophysiology (2019), doi: <https://doi.org/10.1016/j.jacep.2019.04.009>.
2. Leshem E, 2018, High-Power and Short-Duration Ablation for Pulmonary Vein Isolation, Biophysical Characterization. JACC Clin Electrophysiol. 2018 Apr;4(4):467-479.
3. M-5276-908G-EN. Multi-Channel RF Generator User Manual. (Software 3.0.2).
4. Leshem E, Tschabrunn CM, Jang J, et al. (2017) High-resolution mapping of ventricular scar: evaluation of a novel integrated multielectrode mapping and ablation catheter. JACC: Clinical Electrophysiology 3 (3): 220-231.
5. Houmsse M, Daoud EG (2012) Biophysics and clinical utility of irrigated-tip radiofrequency catheter ablation, Expert Review of Medical Devices, 9:1, 59-70, DOI: 10.1586/erd.11.42