

# i10 Series HD+ Endoscopes Overview

## Next Generation Imaging System

As trends in gastroenterology continue to drive innovations toward better patient care with the introduction of quality indicator measurements and tracking, image quality remains the common fundamental requirement for clinical acceptance and outcome relevance.

The i10 Series HD+ Endoscopes deliver advanced visualization to support physicians' needs for improved detection and treatment of GI diseases.

## More Therapeutic Opportunity

With increased pressure to reduce the costs of healthcare delivery, there is a growing demand for interventional endoscopy rather than traditional surgical management of some GI disorders.

The new i10 Series HD+ Endoscopes are designed to bring more therapeutic capability to the everyday endoscopic procedure. New features, such as larger instrument channels and improved distal tip maneuverability, are intended to expand the physician's device options and support complex skill requirements for therapeutic treatment of GI disorders.

## Improved Ergonomic Design and Control

The endoscopist's daily procedure volume is expanding and putting more strain on the endoscopist to do more cases and reduce procedure times.

The i10 Series HD+ Endoscopes are designed with the latest ergonomic control body to better support higher case volumes and overall comfort in the physician's hand. PENTAX Medical Insertion Tubes are designed to balance efficiency, consistency, and patient comfort in colonoscopy.

## i10 Series HD+ EGD Endoscopes



### Standard HD+ Gastroscope | EG29-i10

The Standard HD+ Gastroscope provides high definition visualization and greater therapeutic opportunity through a new, larger 3.2mm instrument channel in a common diagnostic-use gastroscope.

### Slim HD+ Gastroscope | EG27-i10

The Slim HD+ Gastroscope is a slimmer 9.0mm upper GI endoscope with a 2.8mm instrument channel and more acute tip angulation for high definition image resolution and optimal therapeutic access to treatment areas.

## i10 Series HD+ Colonoscopy Endoscopes



### Standard HD+ Colonoscope | EC38-i10L

The Standard HD+ Colonoscope delivers high definition image quality and ergonomic design for the support of high quality patient care in both colon cancer screening and therapeutic treatment of other colon disorders.

### Slim Standard HD+ Colonoscope | EC34-i10L

The Slim Standard HD+ Colonoscope is designed for the GI endoscopist who prefers a slimmer, everyday scope for colon cancer screening and treating colon disorders, but needs a larger 3.8mm instrument channel to retain the same therapeutic capability and suction power of a 38f colonoscope.

# Raising the Standards of Clinical Acceptance

Demonstrating PENTAX Medical's commitment to the advancement of quality endoscopy with more therapeutic and specialized treatment opportunity and increased profitability through revenue growth and reduced cost of ownership.



Model Number	Product Description	Channel Diameter (mm)	Outer Diameter (mm)	Working Length (mm)	Up/Down Angulation (°)	Left/Right Angulation (°)	Angle of View (°)	Depth of Field (mm)	Forward Water Jet	Image Type	CCD Type	Control Body
EGD												
EG29-i10	Standard HD+	3.2	9.8	1050	210/120	120/120	140	2-100 (CloseFocus™)	Y	Video	HD+	i10 Ergonomic Control Body
EG27-i10	Slim HD+	2.8	9.0	1050	210/120	120/120	140	2-100 (CloseFocus™)	-	Video	HD+	i10 Ergonomic Control Body
Colonoscopy												
EC38-i10L	Standard HD+	3.8	13.2	1700	180/180	160/160	140	4-100	Y	Video	HD+	i10 Ergonomic Control Body
EC34-i10L	Slim Standard HD+	3.8	11.6	1700	180/180	160/160	140	2-100 (CloseFocus™)	Y	Video	HD+	i10 Ergonomic Control Body

## PENTAX Medical

Americas Head Office  
3 Paragon Drive  
Montvale, NJ 07645  
Phone +1 800 431 5880  
Fax +1 201 391 4189  
pentaxmedical.com

Canadian Head Office  
6715 Millcreek Drive, Unit 1  
Mississauga, ON L5N 5V2  
Phone +1 800 750 5558  
Fax +1 905 286 5571  
pentaxmedical.ca

**PENTAX**  
MEDICAL

All referenced data was sourced from PENTAX Medical data on file.

Copyright 2014. All Rights Reserved. All company and product names and marks contained within are federally registered trademarks, trademarks, or service marks of PENTAX of America, Inc. Product specifications are subject to change without notice, and without any obligation on the part of the manufacturer.

MK-618 Rev: C



**PENTAX Medical** i10 Series HD+ Endoscopes  
*Ergonomic Design, Superior Function, Quality Care*

**PENTAX**  
MEDICAL

# PENTAX Medical i10 Series HD+ Endoscopes



## Raising the Standards of Clinical Acceptance

Engineered and designed in partnership with healthcare professionals, the i10 Series HD+ Endoscopes provide high-quality, clinically relevant innovation with the intent to improve patient outcomes and reduce healthcare costs.

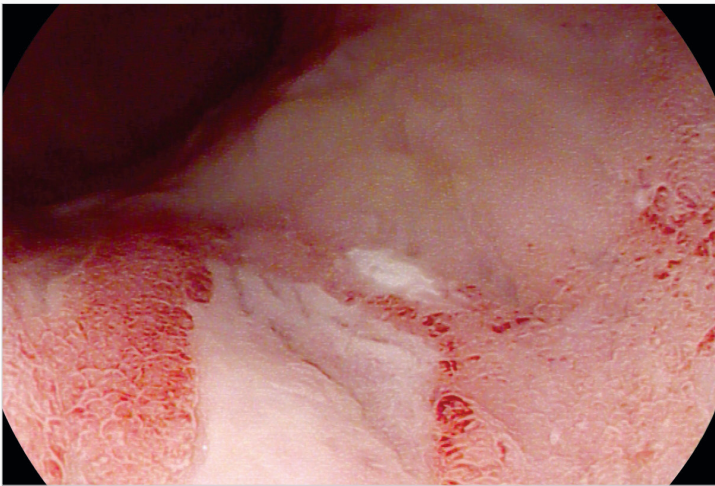
The development of the i10 Series HD+ Endoscopes demonstrates PENTAX Medical's commitment to the advancement of quality endoscopy with more therapeutic and specialized treatment opportunities and increased profitability through revenue growth and reduced cost of ownership.

i10 Series HD+ Endoscopes provide incredibly vivid imaging when combined with the state-of-the-art EPK-i<sup>®</sup>5010 video processor.

## Key Features Next Generation Imaging System

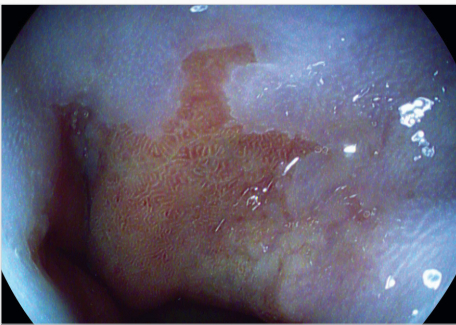
### HD+™ Megapixel Resolution CCD

High-definition endoscopy has become the standard in clinical care. An increasing number of endoscopists regularly make use of advanced technologies in their daily work. PENTAX Medical surpasses this standard with HD+™ Megapixel Resolution CCDs, which provide over one million pixels for exceptional image clarity and detail resolution.



HD+™ Megapixel Resolution CCD image of a colon with ulcerative colitis

Source: PENTAX Medical Global Image Archive



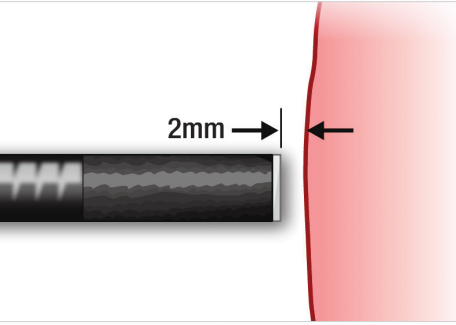
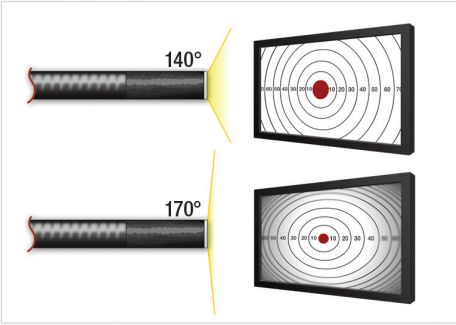
PENTAX i-SCAN™ i-SCAN 2  
Source: PENTAX Medical Global Image Archive

### PENTAX i-SCAN™ Image Enhancement

PENTAX i-SCAN™ is a digital, post-processing image enhancement technology that provides the user with an enhanced view of the texture of the mucosal surface and the blood vessels. i-SCAN™ has three different default settings: i-SCAN 1, i-SCAN 2, and i-SCAN 3, all of which can be simply accessed with the touch of a button.

### 140° Effective Field of View (EFOV™)

i10 Series HD+ Endoscopes are designed with 140-degree Effective Field of View (EFOV™) to maximize the endoscopic view with emphasis on full frame brightness, resolution, and minimized edge distortion. 140-degree EFOV yields four times greater magnification than other wider-angled endoscope designs for better recognition of even slight changes in mucosal surface.



### CloseFocus™ Examination Range

CloseFocus™ Examination Range allows the physician to get as close as 2mm from the mucosa for even greater resolving power and magnified visualization of the tissue and capillary networks automatically, without the need for button activation.

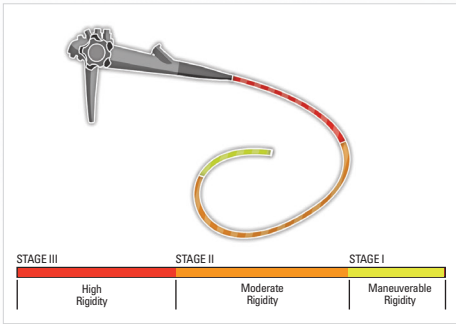
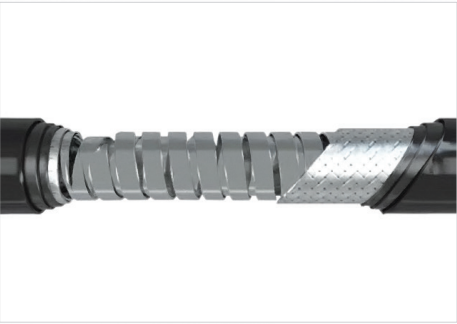
## Key Features More Therapeutic Opportunity

### Larger Instrument Channels

The new Standard HD+ Gastroscope (EG29-i10) and Standard Slim HD+ Colonoscope (EC34-i10L) feature larger instrument channels — 3.2mm and 3.8mm respectively. This results in increased suction power, and the opportunity to use larger accessories and suction, even while the accessory is in use.



## Improved Ergonomic Design and Control



### Ergonomic Control Body

i10 Series HD+ Endoscopes are equipped with a new and lightweight ergonomic control body design that provides improved comfort and minimized repetitive use fatigue. It is more compact and lighter — 30g lighter — than its 90i Series predecessor. Innovatively designed angulation knobs and a sixth spoke enable comfortable one-handed control, while repositioned buttons facilitate more intuitive access.

### TrueTorque™ Insertion Tube Design

PENTAX Medical engineers emphasize torque transfer when designing our colonoscopes. The result is the PENTAX Medical TrueTorque™ Design — a double coil of proprietary material precisely spaced to efficiently transfer torque from the physician's hand to the scope. Endoscopists typically utilize torque for precision steering through the colon, effectively managing loop formations, and introducing additional stiffness into the scope when advancing through the colon.

### i-FLEX™ Graduated Stiffness Design

PENTAX Medical Insertion Tubes are designed with a specific and predictable stiffness profile called i-FLEX™ Graduated Stiffness. i-FLEX Graduated Stiffness has three stages of rigidity to allow for optimal maneuverability at the distal end when navigating the turns and bends of the colon and increased stiffness in later stages to effectively transfer forward forces to advance the scope and minimize loop formations. This occurs without the need of additional mechanisms to add stiffness into the scope.