



Fit your life,
with our FIT



OC-SENSOR R70

HIGH-THROUGHPUT, STABLE & RELIABLE

OC-SENSOR R70 supports reliable screening and routine diagnosis of lower gastrointestinal diseases.



Integrated Faecal Immunochemical Test (FIT) and Faecal Calprotectin Test (FCA) from a Single Stool Sample

By enabling both FIT and FCA testing from a single Sampling Bottle, OC-SENSOR R70 has the potential to expand clinical utility of stool-based testing.

FIT supports colorectal cancer screening for asymptomatic population as well as diagnostic aid and monitoring for symptomatic patients, while FCA measurement provides diagnostic aid and monitoring of inflammatory bowel diseases (IBD; e.g. ulcerative colitis, and Crohn's disease) in conjunction with other clinical findings.

Together, these results contribute to effective patient stratification and support routine clinical workflows.



High-Throughput and Reliable Performance for Screening and Clinical Testing

OC-SENSOR R70 is designed for laboratories handling both high-volume screening and symptomatic patient testing, delivering high processing capacity along with stable and reliable analytical performance.

Automated operation and consistent temperature control ensure dependable results, helping laboratories maintain confidence in routine screening and clinical testing workflows.



Designed to Keep Daily Laboratory Workflows Running Smoothly

As testing workloads increase, OC-SENSOR R70 supports stable daily operation across screening programmes and testing in symptomatic patients by simplifying routine processes and minimising manual intervention. The system sustains high-throughput, even during multi-parameter testing, helping laboratories maintain efficient operation in demanding environments.

Essential Functions for High-Throughput Screening and Clinical Testing

Random Access

Bidirectional communication between R70 and the host allows for multi-item order processing in each sample, while maintaining a high-throughput of 320 tests per hour.

Refrigerator for On-Board Reagents

The reagent bottles are designed to be stored onboard under refrigerated conditions, eliminating the need for cap closure after use.

Setting reagents

Holds reagents for approximately 1,440 tests (4 sets) for FIT. The R70 supports high-throughput population screening

Full automation

Equipped with automatic startup and one-touch shutdown. In addition, testing restarts automatically when a sample rack is added during analysis

Barcode Readers

Enable integrated information management in laboratory processes.

Automatic identification of measurement modes

Barcodes on racks enable the measurement mode to be identified automatically.

6-Point Calibrator

The ready-to-use calibrator minimises inter-laboratory variation, helping to improve testing consistency.



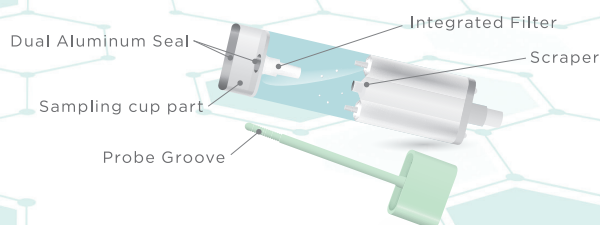
Multiple Tests with Sampling Bottle

A common Sampling Bottle (OC-Auto Sampling Bottle 3 & 4) reduces the burden of instructing patients on stool sampling and managing sampling devices, which used to be different for each test item.



Integrated Filtering System

Extraction is completed within Sampling Bottle.



Reliable Analytical Performance

OC-SENSOR R70 delivers stable and reliable analytical performance optimised for high-throughput routine stool testing.

Limit of Detection & Quantitation

Analyser	Limit	FIT	FCa
OC-SENSOR R70	LOD	2.0 µg/g (10 ng/mL)	17 µg/g
	LOQ	5.8 µg/g (29 ng/mL)	24 µg/g

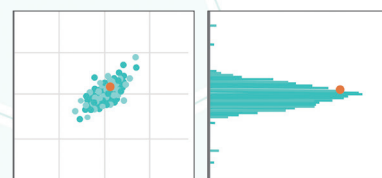
Between-day precision

Analyser	QC Level	FIT			FCa		
		Mean(ng/mL)	SD	CV	Mean(µg/g)	SD	CV
OC-SENSOR R70	LV3	72.6	1.0	1.4%	85.5	1.6	1.9%
	LV1	150.3	2.7	1.8%	248.6	2.3	0.9%
	LV2	450.4	5.8	1.3%	496.6	4.9	1.0%

(in-house data)

Inter-Laboratory Quality Control

Eiken offers an external quality assessment service (Eiken Quality Control Survey; EQCS) for OC-SENSOR users through our local distributors. The service started in 1995 and currently more than 1,700 laboratories from 35+ countries participate in the programme every year. EQCS supports laboratories to assess their performance objectively by comparison of the testing results among the participants.



Main specifications

General	Product name	OC-SENSOR R70
	Principle	Latex agglutination immunoturbidimetry
Analysis	Test items	Faecal Immunochemical Test, Faecal Calprotectin
	Throughput	320 tests/hour
	Calibration	Ready-to-use liquid multipoint calibrator (6 points)
	Hook effect	PRC method, RBC method
	Barcode reading	Rack barcode, Sample barcode and Reagent barcode (standard); QC and Calibrator barcodes (via optional Handy Barcode Reader)
Sample	Sample run capacity	200 samples: 10-sample racks × 20, Continuous loading
	Retest	Automatic retest and dilution test (× 10, × 20, × 100, × 200, × 400)
	QC materials	Liquid controls LV1 (Middle), LV2 (High), LV3 (Low)
	STAT sample setting	Up to 10 samples
	Sample dispense	Sampling nozzle with liquid level detection sensor and nozzle washing function
Reagent	Reagent loading capacity	4 reagent sets (R1, R2) and 2 sample diluents
	Refrigerating system	Peltier cooling system surrounding reagent storage area (working for 24 hours)
	Reagent dispense	Reagent nozzle with liquid level detection sensor and nozzle washing function
Reaction	First result	FIT 9 min, FCa 12 min, FIT and FCa 12 min
	Cuvettes	Semi-disposable cuvettes (11-sample cells; 5 cuvettes can be loaded), automatic washing with wash solution and purified water
	Mixing mechanism	Mixer rotating system with washing function
	Heating system	Air bath heating system for reaction table
	Light source / Detector	LED (Wavelength: 660 nm) / Photodiode
Interface	Operation control/data processing	Multi-CPU system on internal network connection
	Memory capacity	Sample 1,000,000 tests, QC material 1,000 tests per QC lot
	Operation panel / Input device	Colour LCD touchscreen (10.4-inch), barcode reader
	Output device	Thermal Printer (thermal paper width: 58 mm), Internal SSD, External media over USB connection
	Security	Programmable operator authorisation
	Optional reader	2D Code Reader and Handy Barcode Reader
	External connectivity	RS-232C, Ethernet
Environmental	Dimensions	700 mm × 706 mm × 589 mm (W × D × H, ±2%)
	Weight	70 kg (±4%)
	Insulation rating	Basic insulation: 1500 V (RS-232C, LAN)
	Power supply	AC100-240 V ±10% 50/60 Hz 500 VA or less

Notes: •Reagents, calibrators, QC materials, and sampling bottles are not included and are sold separately.
•For warnings and precautions, please refer to the applicable Instructions for Use and the instrument's Operation Manual.
•For healthcare professionals only.