

ES-5

Virgo

RICE QUALITY  
SCANNER



OPTIONAL

Graphic Processing Software



- Use a computer to keep data such as names of batch producer, variety, results and images.
- Inpect graphic (reflective and see-through data) and single kernel information.  
Learn about the surface area/length/width of each kernel and analyze your samples with category tables and bar graphs.
- Export results in text files.  
Manage data in excel files.

Carrying Bag

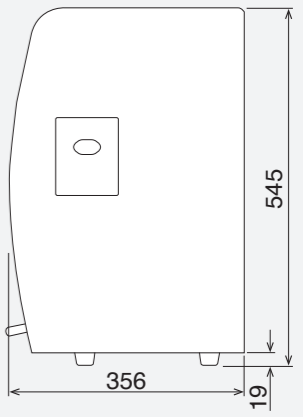
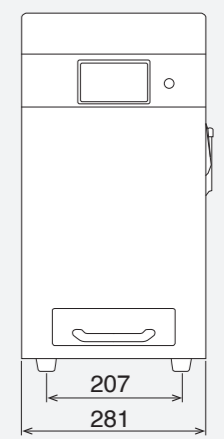
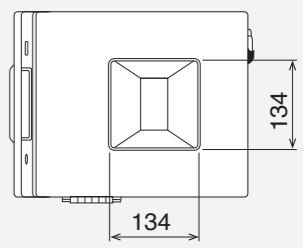
- For carrying the device



SPECIFICATIONS ES-5

Checking Methods	Light source	LED light
	High-resolution image sensor	Dual fine color line scan camera
	Scanning method	The stationary optical system scans kernels while the sample falls through
Grains	ES-5: Brown japonica rice ES-5 (Polished rice): Brown japonica rice, polished japonica rice Optional: Polished japonica rice, brown sake rice, brown glutinous rice	
	Main classification	Head rice, cracked kernel, others
	Sub classification	Head rice, immature, cracked kernel, broken, insect-damaged, dead kernel, discolored
	Fine classification	Green mature, other head rice, chalky, green immature, white base, white belly, slim, curved, consistency, slightly rusty, other immature, sprouted, one horizontal crack, two horizontal cracks, abnormal kernels, rusty, broken, spotted, dead green, dead chalky, entirely discolored, partially discolored, red
	Scanning category	Discolored, dead kernel, cracked kernel, broken, chalky immature, head rice※
Scanning Quantity	Max. 1,300 kernels each time	
Time Required	About 5 sec./once (from pressing SCAN button to the display of results)	
Display	4.3 inch colored touch screen	
Print Displayed Results	Impurities: counts of foreign objects and ratio.	
	Others: operation and error messages.	
Data storage	Can save up to 10,000 set of results	
Scanning Condition	Ambient temperature 0~40℃	
Storage Temp.	Relative humidity of less than 85%(no dewing)	
Power	AC100V±10%	
Net Weight	11kg	
Dimension	W281×D356×H545mm	
Accessories	AC power cord, two rolls of printer paper, cloth and brush for cleaning, software in a CD, transformer	
Optional	Computer connection cable, image processing software, software for classifying polished/sake/glutinous/brown rice, case for discharged sample, carrying bag	

DIMENSIONS Unit mm



※ Chalky immature and head rice as reference during an agricultural inspection.  
• The specification and graph are for reference only. Actual specification shall be based on the Sales Confirmation which customers sign and delivered products.

# Free From Visual Checking with Speedy Scans!

## Checks 1,000 kernels in 5 seconds



### "Inspection Mode" for agricultural products inspections

Can be used to detect dead kernel, discolored, cracked and broken kernels for agricultural products inspections. Capable of displaying chalky immature and head rice kernels as reference.



### Can scan all kernels with this device

Suitable for pre-check and auxiliary check because it scans at the same pace as an adept inspector.

### Stress-free Speed and Operability

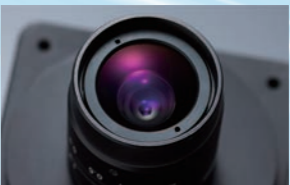
Scans rice kernels at a remarkable speed simply by pressing a button.



\*Display language of ES-5 is Japanese

## 1 One Scan Takes Just 5 Sec.

Precisely scans rice kernels by a color CCD line sensor and a high-speed graphic processor. Required time is shortened from previous 28 sec. to 5 sec.



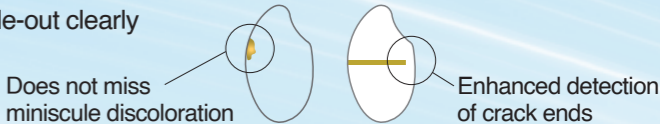
Color CCD line sensor



Graphic processing LSI

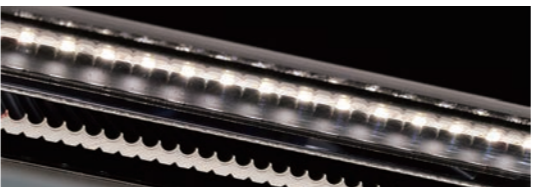
## 2 Fully Evolved Scanning System

The optimized algorithm helps scan paddy kernels inside-out clearly



## 3 Durable & Dust-proof

40,000 hours of LED life span. Durable as device structure is mostly fixed. Sensors are unaffected by dust from large amount of sample thanks to dust-proof design.



## 4 Tool-free Simple Repair

Back/front and top panels can be easily removed. The chute can be removed by one touch. Scanning sections are easy to clean and maintain.



## 5 Built-in High-speed Printer

The high-speed printer takes just 1 second to print main class results. Speedier than ever.



## 6 LCD Touch Screen

LCD touch screens makes it intuitive and simple to operate.



## 7 Can Also Scan Polished, Glutinous & Sake Rice (Optional Functions)

## 8 Saves Up To 10,000 Sets of Data.

### Checking Procedure

#### Put In



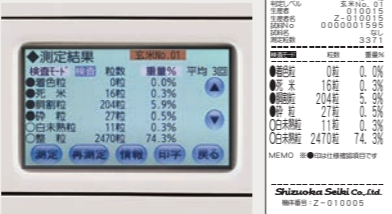
Put your sample into the device

#### Scan



Press SCAN button

#### Results



The screen shows results. Print if needed.

#### Retrieval



Retrieve sample from the device

※The average of three test results of the same sample by a rice quality scanner would be more reliable for agricultural products inspections.

### Can Also Use It For This Purpose.



In a rice milling plant



Quality control room

#### Use It In a Rice Milling Process

Check chalky, broken kernels and whiteness(optional functions) during rice milling

#### Use It For Quality Management

Capable of doing many precise tests in a short time. Durability ensured and precision increased.