



**21<sup>e</sup>** is built to answer the needs of highly demanding applications in the aspect of transaction & data speed, number of peripheral connection, management data & security, flexibility of operation and flexibility of future expansion.



Maximum AD conversion speed up to 480 times per second plus 9 filter strength levels to meet almost all requirements from high-resolution static weighing to high-speed dynamic applications.

User definable PC output protocol means unsurpassed capability to meet all data format requirements from remote displays, production management to ERP systems.

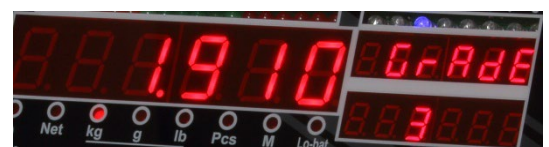
Built-in non-resettable memory to store all details of up to 130,000+ transactions. Daily, monthly and specific period reports can be recalled and generated anytime according to your search criteria.

### Independently Configurable Function Modes

- Static & Dynamic Weighing
- Piece Counting
- Action-Tare-Memory (ATM)
- Peak Measuring
- Grading and Sorting up to 10 Set Points and 8 Grades
- Checking Function for Weighing, Piece Counting, ATM, Grading, and Sorting Function

### Displays and Indications

- 1 Primary plus 2 Secondary Displays provide Clear Information about Results, Settings, and Next Target Value of the Current Operation
- Tri-Color Check Result Light Bars Present Pin-Point Accuracy about where and how far the Current Weight is and away from the Target Value
- Zero, Net, Weight Unit, Memory, Lo Battery, Relay Output and Charge Status Indicators



***Versatility, Functionality and Accuracy are always Built-in***

# 21e Configurable Indicator

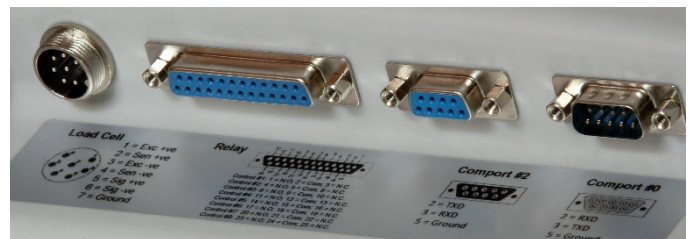
## Built-In Control Logic

- Static and Dynamic Check
- Inflow and Outflow Control
- Constant Feeding
- Constant Dispensing with Auto Refilling,
- Dual Speed Filling
- Batching up to 8 Ingredients
- Dual Speed Discharge
- Discharge and Refill
- User Programmable Logic for each and individual Relay Output



## Connectivity

- Maximum 4 independent configurable comports.  
Maximum Baud Rate = 921600
  - Hardwire Connection Types (standard) include RS232, RS485 and TTL
  - Wireless Communication Types (optional) include Bluetooth 2.0 /4.0 and WIFI
- Optional isolated RS232 to Ensure High Speed Data Communication even in a High Interference Environment
- Optional Built-in 8-Channel Control Relay Board.



## Operation Features

- Primary and Secondary Displays: -
  - Display #1: - 6 x 25mm LED Numeric Digits
  - Display #2: - 6 x 10mm LED Numeric Digits
  - Display #3: - 6 x 10mm LED Numeric Digits
- Support Single Range, Dual Range and Dual Interval Operation
- Support both Tension and Compression Load / Force Direction
- Near Zero Weight Value for Dynamic Weighing to avoid False Signal Output
- Repetitive and Continuous Tare Operation
- Continuous Tare with Configurable Delay Time before Tare Action
- Real Time Clock with Backup Battery
- Watchdog System to Prevent Damages Caused by Load Cell Short-circuit.
- Configurable Tri-Color Check Result Light Bar
- Configurable Keypad, Check & System Buzzer

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## Management Features

- 130000+ Non-Resettable Transaction Memory
- Daily, Monthly, specific Period Report Output
- Multi Search Criteria for Report Generation
- Configurable Machine ID, Machine Group and Operator Number to Enhance Ease of Multi-Scales Applications and Management Records
- Customer & Product Code Input through Serial Scanner, Keypad or Barcode Reader
- Customer & Product Code Support Numbers, Alphabets and Selected Symbols
- Quick Access PLUs for Weight Limits, Quantity Limits and Preset Tare Values
- Direct PLUs for Customer & Product Codes
- Check Result Control for Accumulation, Data Printout & Data Output
- Keypad Lock Function
- Support Inquiry, Setting and Execution Commands from PC
- All Current Operation Results Output in Data Base Format Increases Ease & Efficiency of Data Management, Processing & Analysis
- Support Ticket Printer and Label Printer
- Label Printers Supported:
  - Datscs: LP-50
  - TSC: TDP/TTP-225, TDP/TTP-247, TDP/TTP-345, DH/TH220 Series, DH/TH240 Series, DH/TH340 Serie
- Selectable Portrait / Landscape Ticket Printout Format
- 10 x Built-in Predefined Continuous / Internal Output Protocol
- User Programmable Continuous / Internal Output Protocol

## Data Base Output Format

	Opr	Seq	Mode	Mac	MacGp	Date	Time	Name	Pcode	Gross	Tare	Net	Low	High	Result	Total.W	Unit				
Weighing	3333	1	0	8888	77	2016/10/6	11:17:08	VNFHRUDHFLQAUMCB	12345678901234567A	12.500	5.000	7.500	4.995	5.005	AboveLimit	7.50	kg				
Weighing	3333	2	0	8888	77	2016/10/6	11:17:14	VNFHRUDHFLQAUMCB	12345678901234567A	15.000	2.500	12.500	4.995	5.005	AboveLimit	20.00	kg				
Weighing	3333	3	0	8888	77	2016/10/6	11:17:22	VNFHRUDHFLQAUMCB	12345678901234567A	15.000	5.000	10.000	4.995	5.005	AboveLimit	30.00	kg				
Weighing	3333	4	0	8888	77	2016/10/6	11:17:29	VNFHRUDHFLQAUMCB	12345678901234567A	10.000	5.000	5.000	4.995	5.005	Accept	35.00	kg				
Weighing	3333	5	0	8888	77	2016/10/6	11:17:46	VNFHRUDHFLQAUMCB	12345678901234567A	7.500	2.500	5.000	9.995	10.005	BelowLimit	40.00	kg				
Weighing	3333	6	0	8888	77	2016/10/6	11:17:50	VNFHRUDHFLQAUMCB	12345678901234567A	5.000	2.500	2.500	9.995	10.005	BelowLimit	42.50	kg				
	Opr	Seq	Mode	Mac	MacGp	Date	Time	Name	Pcode	Gross	Tare	Net	Total.W	Unit	Count	Unit.W	Unit	Low	High	Result	Total.C
Piece Count	3333	1	1	8888	77	2016/10/6	11:18:18	VNFHRUDHFLQAUMCB	12345678901234567A	5.000	2.500	2.500	2.500	kg	19999	0.12499	g	19995	20005	Accept	19999
Piece Count	3333	2	1	8888	77	2016/10/6	11:18:25	VNFHRUDHFLQAUMCB	12345678901234567A	7.500	2.500	5.000	7.500	kg	40002	0.12499	g	19995	20005	AboveLimit	60001
Piece Count	3333	3	1	8888	77	2016/10/6	11:18:31	VNFHRUDHFLQAUMCB	12345678901234567A	7.500	5.000	2.500	10.000	kg	20003	0.12499	g	19995	20005	Accept	80004
Piece Count	3333	4	1	8888	77	2016/10/6	11:18:37	VNFHRUDHFLQAUMCB	12345678901234567A	7.500	5.000	2.500	12.500	kg	20003	0.12499	g	19995	20005	Accept	100007
Piece Count	3333	5	1	8888	77	2016/10/6	11:18:43	VNFHRUDHFLQAUMCB	12345678901234567A	5.000	2.500	2.500	15.000	kg	19999	0.12499	g	19995	20005	Accept	120006
Piece Count	3333	6	1	8888	77	2016/10/6	11:18:47	VNFHRUDHFLQAUMCB	12345678901234567A	7.500	2.500	5.000	20.000	kg	40002	0.12499	g	19995	20005	AboveLimit	160008

### Database Output Content Illustration: - Weighing and Piece Count Mode

## Printout Formats

Time 14:03:25 Date 2017-02-27 Seq 1 Name ASDFGHJKLQWERTYUIO Pcode 123456789012345678 Net 15.000kg Tare 0.000kg Gross 15.000kg Total 15.000kg  High 15.001kg Low 14.999kg Accept	Name ASDFGHJKLQWERTYUIO Pcode 123456789012345678 Opr 0123 Mac 6666 MacGp 22  Date 2017-02-27 Time 13:58:54  Seq Gross Net 001 5.000 5.000 kg 002 5.000 5.000 kg 003 5.000 5.000 kg 004 10.000 10.000 kg 005 10.000 10.000 kg 006 10.000 10.000 kg  006 45.000 kg  Max 10.000 kg Min 5.000 kg Diff 5.000 kg x 7.5000 kg Sd 2.7386 kg Srel 36.5147 %	Name ASDFGHJKLQWERTYUIO Pcode 123456789012345678 Opr 0123 Mac 6666 MacGp 22  Date 2017-02-27  Seq Time Net 001 14:00:17 4.999 kg 002 14:00:20 4.999 kg 003 14:00:23 4.999 kg 004 14:00:27 4.999 kg 005 14:00:30 4.999 kg 006 14:00:33 4.999 kg  006 Total 29.994 kg  Max 4.999 kg Min 4.999 kg Diff 0.000 kg x 4.9990 kg Sd 0.0000 kg Srel 0.00000 %
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Printout Format #2

Printout Format #4  
with Statistic Results Output

Printout Format #5  
with Statistic Results Output

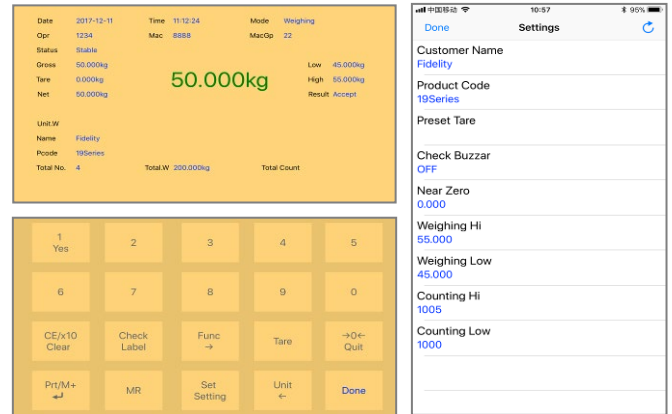
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# 21e Configurable Indicator

## Apps for Smart Phones & Devices

iOS App (i19) & Android App (a19) are available for free download at App Store and Google Play respectively. Both Apps support connection via Bluetooth and WIFI.

These Apps are so powerful that actually they turn your smart devices into a handheld terminal, remote display, remote data input center and controller of your FM product connected.



## End User PC Software

- Freeware Specially Created to Support End Users
- Real Time Operation Status Monitoring
- Operation Parameters Setting
- Real Time Process Monitoring
- Individual and Totalized Record Storage
- Database File Output



## Options

- Stainless Steel Wall/Desk Mount Holder
- SP-POS58IV & SP-POS88IV Thermal Ticket Printer
- Serial Barcode Reader
- WM Wireless Communication Module
- RD-DOT Dot Matrix Remote Display
- Bluetooth 4.0BLE Module
- Bluetooth 2.0 Module
- Isolated RS232
- Built-in 8-Channel Control Relay Board (Factory Installation)
- WIFI Module
- DPP-250 Bluetooth Thermal Printer



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# 21e Configurable Indicator

## Specifications

Capacity and Readability	Free Setting
Weighing Range	Single Range, Dual Range, Dual Interval
Weight Units	kg, g, lb
Displays	<ul style="list-style-type: none"> <li>• Display #1: - 6 x 25mm LED Numeric Digits</li> <li>• Display #2: - 6 x 10mm LED Numeric Digits</li> <li>• Display #3: - 6 x 10mm LED Numeric Digits</li> </ul>
Load Cell Connection	<ul style="list-style-type: none"> <li>• Excitation Voltage = 5V DC</li> <li>• Support both 4-wire &amp; 6-wire Load Cells</li> <li>• Maximum Load Cell Connection = 10 x 350Ω or 20 x 700Ω Load Cells</li> <li>• Maximum Load Cell Rated Output 4mV/V</li> </ul>
A/D Converter & Internal Resolution	<ul style="list-style-type: none"> <li>• 24 bit Low-Noise Delta to Sigma (<math>\Delta-\Sigma</math>)</li> <li>• 3,200,000 Counts at 15 mV</li> <li>• Minimum input per d = 0.05μV</li> </ul>
AD Conversion Speed	15, 30, 60, 120, 240, 480 times/second Selectable
Max. Tare Range	<ul style="list-style-type: none"> <li>• -Max for Single Weighing Interval or</li> <li>• -Max<sub>1</sub> (Subtractive Tare)</li> </ul>
Calibration Methods	<ul style="list-style-type: none"> <li>• 2 Span Points Calibration (Linearity Calibration), or</li> <li>• 1 Span Point Calibration, or</li> <li>• Numeric Calibration Through Keyboard</li> </ul>
Power Source	<ul style="list-style-type: none"> <li>• Built-in Rechargeable Battery = 6V, 4AH</li> <li>• External Power Adaptor = DC 12V, 1A</li> </ul>
Accessories	Pillar Mount Holder (φ35~38mm), Built-in Rechargeable Battery, Universal Power Adaptor, Dust Cover
Packing	<p>Individually Packed</p> <ul style="list-style-type: none"> <li>• Dimensions = 36 x 32 x 16cm. Net / Gross = 2.35 / 2.85kg 6 Units in Shipping Carton</li> <li>• Dimensions = 102 x 35 x 35cm. Net / Gross = 17.00/ 18.50kg</li> </ul>
Operation Environment	-10 ~ 40°C. Non-condensed. R.H. ≤ 85%

*In the interest of improvement, specifications may change prior to notice*



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