

Electronic Printers

# EP-100/EP-110

Enhanced Support for ISO/GLP/GMP

- Built-In Clock
- Affordably Priced

EP-100



- Enhanced Visibility for OLED Display
- Includes Functionality for Preventing Date Alterations

EP-110



### EP-100/110 Shared Functionality

- **Built-In Clock** Date/time can be printed even for balances without a clock function.
- **Customized Printing** In addition to weight measurement values, print items can be added to the end.
- **Easy Communication Settings** Includes functionality (automatic setting function) that automatically sets communication settings based on the given balance.  
Note: This function is disabled for ELB series models and MOC63u moisture analyzers.
- Titles for measurement values can be customized for printing.

### Compatible Balance Models

AP, AU, AT-R, AT, U, TX, TXB, BX/BW-K, BL, and ELB series, and MOC63u moisture analyzers.

Note: The automatic setting function cannot be used with models that do not include the PRINT key, such as ELB series balances and MOC63u moisture analyzers.

### Specifications

Model	EP-100	EP-110
Display	—	OLED 128 × 64 Dot Matrix Display Easy-to-understand fluorescent dot matrix display
Protected Date Setting	—	Password protectable (six-character)
Printing	Paper for printing: Regular paper (does not fade with age) Method: 8-pin reciprocating impact dot matrix Speed: Approx. 1.7 lines/sec. Printer head life: 1 million lines Character size: Approx. W1.7 × H2.6 mm	
Interface	USB B-Type female, RS-232 (D-sub 9-pin male)	
Power Supply	AC adapter: Input 100 to 240 V AC, 50/60 Hz; Output 12 V DC/1500 mA Power consumption: 8 W (while printing) Standby power: 0.5 W (when not printing)	
Battery	—	1500 to 2500 mAh capacity rechargeable nickel-metal hydride (NiMH) batteries can be used (four AA cells). Note: Dry cell batteries cannot be used.
Installation Environment	Temperature: 5 to 45 °C; Humidity: 10 to 80 % No condensation	

### Maintenance Parts

Description
Recording Paper
Labeling Paper Rolls
Ink Ribbon
AC Adapter
Connection Cable

### EP-110 Function

#### Supports GLP/GMP Using Password Protection-Based Date/Time Alteration Prevention

#### Powered by Rechargeable Batteries

Eliminating the need for an AC adapter connection, the printer can be used as a portable device. It also means the printer can be used in locations without a power supply outlet, such as within a fume hood. Note: Dry cell batteries cannot be used (compatible with nickel metal hydride batteries).

#### Status Display with Enhanced Visibility for OLED Display

The OLED display makes it easier to determine the measurement mode-based status. The OLED display also ensures visibility even in dark locations.



(Printout Samples)

Normal Mode

Statistical Calculation Mode

Item	Normal Mode	Statistical Calculation Mode
Manufacturer Information	Shimadzu Corporation	Shimadzu Corporation
Device Name	Model: ATR220	Model: ATR220
Serial No.	S/N: D23452456	S/N: D23452456
Sample Name (ID)	ID:	ID:
Date	Date: 2014-00-10	Date: 2014-00-10
Measurement Start Time	Start Time: 22:23:51	Start Time: 22:26:24
Measurement Values	No.001 10.0000 g No.002 10.0001 g No.003 10.0002 g	No.001 10.0000 g No.002 10.0007 g No.003 10.0005 g
Measurement End Time	End Time: 22:23:58	End Time: 22:26:55
Signature Field	Signature:	Signature:

### Output Items

Item	Symbol	Remarks
Title (Header)		Manufacturer information, device name, serial number (S/N), date, and measurement start time
Number of samples	N	
Total value	T	
Maximum value	MAX	
Minimum value	MIN	
Range	RNG	= MAX - MIN
Mean value	MEAN	= T / N
Standard deviation	SD	$\sqrt{\sum(Xi-MEAN)^2/(N-1)}$
Coefficient of variation	CV	(SD / MEAN x 100)%
Data suffix (footer)		Measurement end time and signature field