EXPLORER® SERIES

Semi-Micro, Analytical and Precision Balances

Reliable Precision.
Intelligent Performance.
Unmatched Functionality.

Ingeniously Practical

Explorer series
Semi-Micro, Analytical and Precision Balances

The OHAUS Explorer series of electronic balances combine modern features and design elements to offer unmatched functionality in a line of high-performance balances unlike any other on the market. These smart and intuitive balances simplify even the most complex measurements, and are suited to both laboratory or industrial environments, and applications.

Semi-Micro
Readability of 0.01 mg and capacities up to 220 g

*IP54 only for weighing base

Analytical
Readability of 0.1 mg and capacities up to 320 g

Precision
Readabilities from 0.1 g to 1 mg and capacities up to 10 kg

High Capacity
Ultra-high resolution IP54 rated* high capacity balances with capacities up to 35 kg with 0.1 g readability

High Performance Loadcell

Explorer's high-speed single module loadcell is precision-made from a single block of metal. This advanced design makes it rugged, highly repeatable, and suitable for a wide variety of environments and applications.

Temperature Compensated Loadcells

Each weighing cell is individually temperature compensated and undergoes OHAUS' rigorous testing process under a range of conditions. OHAUS' industry leading signal processing and advanced filter options prevent drift, and allows for use in sub-optimal environments.

Autocal™ Automatic Internal Calibration

OHAUS' signature AutoCal™ automatic internal calibration system ensures the balance is always ready for use with an adjustable temperature sensor.
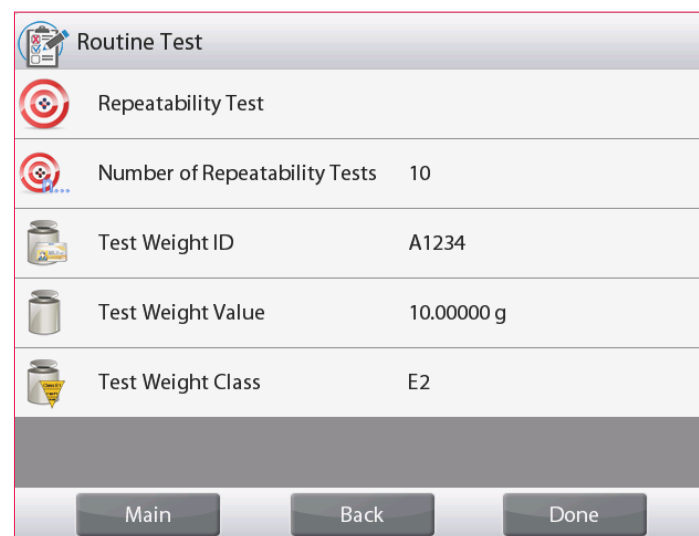
Built In Repeatability Test

A built-in repeatability test helps evaluate the balance's performance, and aids in determining a suitable minimum weight for applications requiring high accuracy.

Online application video available

High Quality Materials

High quality materials are essential for reliably precise results, as well as product durability and longevity. Explorer's weighing base features sturdy die-cast construction, and the weighing chamber features a 316 (medical class stainless steel) weighing pan and plate, as well as anti-static coatings on draftshield glass panels.

Quality Certification

OHAUS has obtained ISO14000 environmental quality certification, which recognizes manufacturers committed to using environmentally friendly materials, such as lead-free electronic components.

Supports Data Integrity

Explorer balances are perfect for use in regulated areas and make it easy to comply with laboratory and industrial regulations, such as those put forth by the FDA and USP. Explorer's built in features help ensure that recorded measurement data is accurate and consistent.

User Management

Explorer series balances offer a role-based user management system that prevents unauthorized changes. The enhanced user management system allows an administrator to create up to 113 user accounts and assign them to one of four pre-existing groups with access rights to the balance.

- Administrator (1)
- Supervisor (maximum of 10)
- Operators (100)
- Log Viewing (2)

Password Protection

In a multi-user environment, data integrity and the ability to create user passwords with pre-set expiration dates is essential. Explorer series balances offer comprehensive password administration for increased security.

- Gives the ability to enforce complex password policies such as password strength, and frequency at which users must change them.

- Has an auto logout feature which forces a user to log in after a period of inactivity, helping to prevent access to unauthorized features or incorrectly attributing measurements to a different user.

System Log and Traceability ▶

In certain circumstances, it is necessary to keep a complete chronological log of system events and changes to operational parameters of a balance in order to comply with rules and regulations within a particular industry.
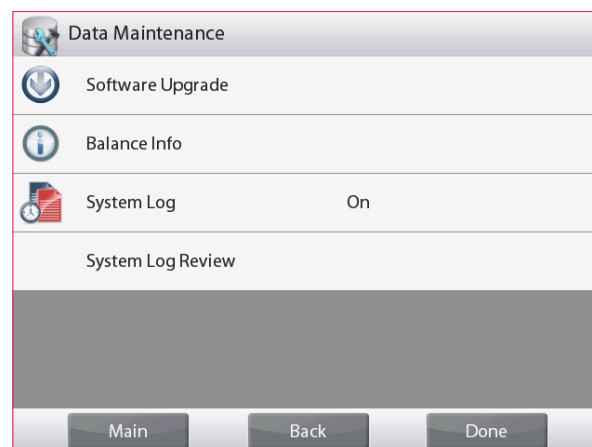
```
Log exported at: 2/27/2020 14:57:05
Log exported by: Jeremy
Total log records: 435

2/27/2020 14:56:21    Jeremy    Log in
2/27/2020 14:56:10    Adam    Log out
2/27/2020 14:55:48    Adam    Log in
2/27/2020 14:55:39    Admin    Log out
2/27/2020 14:55:26    Admin    Set System Log to Off
2/27/2020 14:54:56    Admin    Set System Log to Off
2/27/2020 14:54:38    Admin    Log in
2/27/2020 14:53:23    Admin    Log out
2/27/2020 14:49:05    Admin    Log in
2/27/2020 14:48:38    Admin    Log out
2/27/2020 14:28:18    Admin    Switch from Fill Weight Variation to Weighing
2/27/2020 14:27:31    Admin    Log in
2/27/2020 14:27:25    Adam    Log out
2/27/2020 14:23:37    Adam    Switch from Weighing to Fill Weight Variation
2/27/2020 14:23:01    Adam    Log in
2/27/2020 14:22:36    Jeremy    Log out
2/27/2020 14:22:28    Jeremy    Set System Log to Off
2/27/2020 14:22:09    Jeremy    Log in
2/27/2020 14:21:59    Admin    Log out
2/27/2020 14:16:38    Admin    Fill Weight Variation Result Printed
2/27/2020 14:06:13    Admin    Switch from Weighing to Fill Weight Variation
2/27/2020 14:03:59    Admin    Switch from Fill Weight Variation to Weighing
2/27/2020 14:01:11    Admin    Fill Weight Variation Result Printed
2/27/2020 13:52:07    Admin    Switch from Weighing to Fill Weight Variation
2/27/2020 13:50:41    Admin    Switch from Fill Weight Variation to Weighing
2/27/2020 13:45:26    Admin    Switch from Weighing to Fill Weight Variation
2/27/2020 13:40:52    Admin    Switch from Fill Weight Variation to Weighing
2/27/2020 13:40:03    Admin    Switch from Weighing to Fill Weight Variation
```

Real Time Clock and GMP/GLP Fields

A built-in real time clock which allows for date and time stamping of results and a large set of GMP/GLP fields allows for the identification of the balance, and the sample batch and I.D., which can be printed with each result. Together with the user management system, it makes it easy to identify the sample, who made a measurement and when, and which balance was used.

System Event Log

Explorer balances have a secure, temper-proof internal event log that records events such as changes to balance settings, user events (such as user login or the creation of a new user), calibrations or adjustments performed, etc. The event log can be either viewed on the device or exported directly to a PDF on the device, with no PC or additional software required. The system event log can hold up to 5000 records.

Data Maintenance

- Software Upgrade
- Balance Info
- System Log   On
- System Log Review
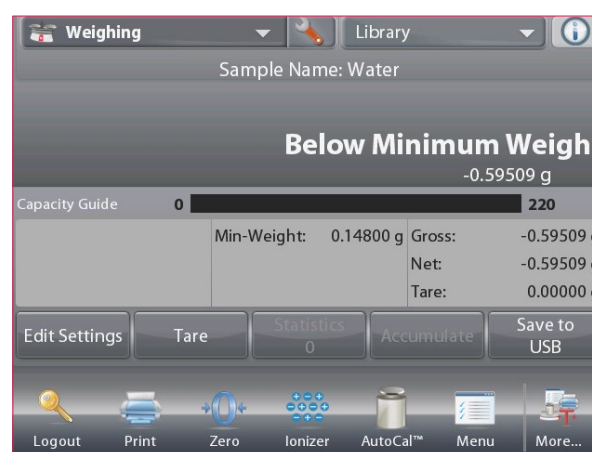
| Main | Back | Done |

Calibration Log

A built-in calibration log automatically records the results of all calibrations performed on the balance, thereby facilitating traceability of captured data by allowing a user or auditor to verify the condition of the balance during the period in which a measurement was made.

Minimum Weight ▶

Explorer balances facilitate the implementation of a minimum weight standard in applications where a maximum uncertainty tolerance must be guaranteed. In the event that a minimum weight is specified, a minimum weight enforcement feature can ensure that it is strictly observed by notifying the user if a net weight falls below the set weight, and prevents data from being captured (e.g. printed).

| Weighing ▼ | 🔍 | Library ▼ | ℹ |

Sample Name: Water

Below Minimum Weight
-0.59509 g

Capacity Guide   0 ▬▬▬▬▬▬ 220

Min-Weight: 0.14800 g   Gross: -0.59509 g
                            Net: -0.59509 g
                            Tare: 0.00000 g

| Edit Settings | Tare | Statistics 0 | Accumulate | Save to USB |

| Logout | Print | Zero | Ionizer | AutoCal™ | Menu | More... |

▶ Online application video available

Intuitive Interface

Explorer offers an intuitive interface, and a large, color graphic touchscreen makes setup easy. The display can be set to any of 14 languages.

Library ▶

Explorer's built in library simplifies working with multiple samples, allowing application settings to be saved and recalled for reuse.

Barcode Scanner Support

By using a connected barcode scanner, Explorer balances allow quick entry of sample IDs which can be used to identify individual samples on printout and captured data. OHAUS supports several scanners from Datalogic (Heron, QuickScan, Gryphon 4100 and 4400).

Touchless Sensors

Multiple programmable touchless sensors allow the user to initiate balance functions such as zero, tare, print, automatically open draftshield doors, and more.

Multiple weighing applications with built in statistics simplify advanced workflows, and result in saved time and reduced errors. Explorer balances provide the following weighing applications:

▶ **Basic Weighing**
Displays the weight of the object.

Parts Weighing
Displays the number of pieces or parts based on an average piece weight.

Percent Weighing
Displays the current weight as a percentage of a reference weight.

Check Weighing
Checks if the current weight is within tolerances (e.g. an over and under limit).

Dynamic Weighing
Used to weigh objects that are not stable, such as animals.

Filling
Used to add weight to reach a target value.

Totalization
Sums multiple samples which may ultimately exceed the balance's capacity or would not fit on the pan.

Formulation
Used to combine various elements in proportionate amounts.

Differential Weighing
Calculates the difference in weights of multiple samples taken at different times.

▶ **Density Determination**
Determines the density of a solid or a liquid.

Peak Hold
Captures the maximum weight in a series of weighings.

▶ **Pipette Adjustment**
Calculates the inaccuracy and imprecision of pipettes, used to check if a pipette's dosage is within tolerances.

SQC (Statistical Quality Control)
Used to determine the homogeneity of items in a batch and batches over time.

▶ **Fill Weight Variation**
Checks the homogeneity of a series of items.

▶ Online application video available

Advanced Connectivity & Communication

Communication Interfaces

Explorer balances are equipped with several communication interfaces that allow balances to be connected directly to a PC, integrated into a larger system such as LIMS or ERP, or connect to available accessories like printers and barcode scanners including:

- RS-232
- USB host and USB device ports
- An optional Ethernet port

Easy and Configurable Data Output

A configurable print output allows you to select which information is captured or printed as well as define the printout format, which provides flexibility when connecting to printers or computer systems.

Using OHAUS' free Serial Port Data Collection (SPDC) software, data from the balance can be easily captured onto a PC, into text files, directly into Excel, or into databases such as Microsoft Access.

Accessories

The Explorer balance is compatible with a wide array of available accessories designed to make measuring for specific applications and recording data easy.

All Explorer balances can be used with included weigh below hooks, which allow large samples to be weighed by hanging them below the balance.

Impact SF40A printer	Density kit	Pipette adjustment kit
Barcode scanner	Stand-alone Ionizer	Auxiliary display (AD7-RS)
RS232 - USB cable	Grid pan (for semi-micro models)	Ethernet option

OHAUS Corporation

Headquartered in Parsippany, NJ, OHAUS Corporation manufactures an extensive line of balances and scales, lab equipment and lab instruments that meet the weighing, sample processing and measurement needs of multiple industries. We are a global leader in the laboratory, industrial and education markets, as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. An ISO 9001:2008 manufacturer, OHAUS produces lab balances, industrial scales, lab equipment and lab instruments that are precise, reliable and affordable, and backed by industry-leading customer support.

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