



# 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

**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

\*IP54 only for weighing base

# Outstanding Weighing Performance

## 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.



## Built In Repeatability Test

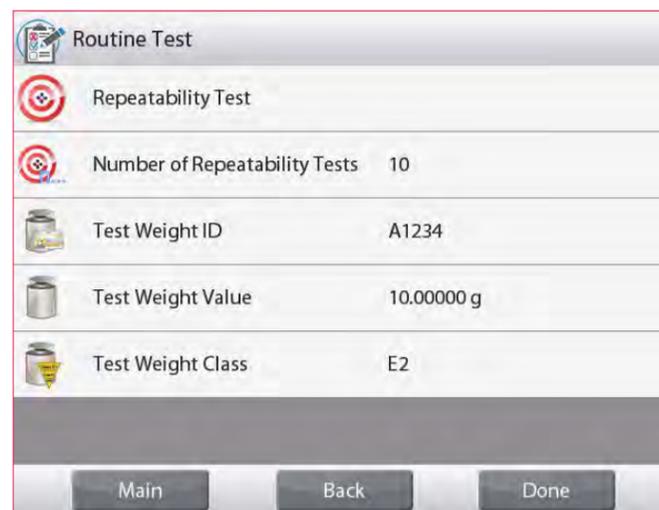
A built-in repeatability test helps evaluate the balance's performance, and aids in determining a suitable minimum weight for applications requiring high accuracy.

Online application video available



## Autocal™ Automatic Internal Calibration

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



# Superior Quality and Durability

## 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.



User Profiles			
#	User Name	Group	Password
>> 1	Admin	Administrator	
2	Jeremy	Supervisor	*****
3	Jonny	Operator	*****
4	Adam	Log Viewer	*****

Buttons: New, Edit, Delete, Return to Application

# Superior Quality and Durability

## 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

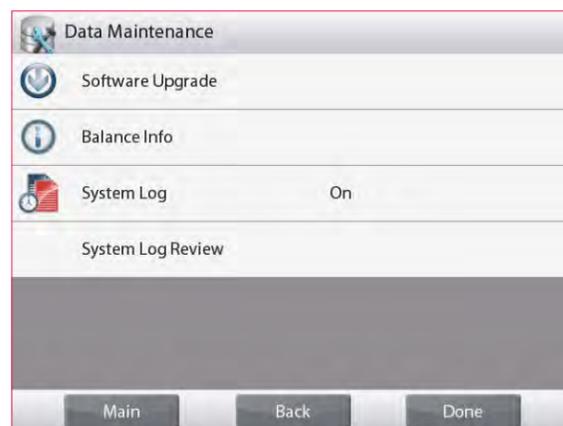
2/27/2020 14:56:21	Jeremy	Log in
2/27/2020 14:56:10	Adam	Log out
2/27/2020 14:55:48	Adam	Log in
2/27/2020 14:55:39	Admin	Log out
2/27/2020 14:55:26	Admin	Set System Log to Off
2/27/2020 14:54:56	Admin	Set System Log to Off
2/27/2020 14:54:38	Admin	Log in
2/27/2020 14:53:23	Admin	Log out
2/27/2020 14:49:05	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.



## 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).



 Online application video available

# Operational Efficiency

## 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.



# Weighing Applications

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



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