STALWART

**Ultra Micro Balance
STB-M Series**

Introduction

The micro balance is the latest high-performance and GMP compliant intelligent electronic balance launched by Stalwart instruments, with a maximum design accuracy of 1 μ g. It can meet your specific needs and compliance requirements, thereby maximizing work efficiency and accuracy of experimental results. The balance adopts a brand-new monolithic sensor as the core component of the weighing device, which directly determines the speed, accuracy, and stability of weighing.

Features

Adopt new super monolithic sensor technology - accurate, fast, stable and reliable.
♦ Sensitivity: unparalleled sensor design and processing technology ensure the sensitivity of micro-weighting results
♦ Precision: Particular super monolithic sensor technology ensures the accuracy, stability and consistency of weighing results.
♦ High-Speed: The sensor technology of horizontal bar, combined with excellent circuit design and software algorithm, meets the requirements of rapid weighing in the laboratory
Compliance with 21CFR Part 11 - full traceability
♦ Designed in accordance with FDA data integrity principles to achieve attributable, legible, contemporaneous, original, and accurate data (ALCOA).
♦ User administration: Three-level user administration through access control
♦ Electronic Signature: The user''s electronic signature can be used to sign the final report of the weighing operation.
♦ Audit Trail and Weighing Log: An audit trail is a tamper-proof electronic log file with a timestamp that allows the reconstruction of events related to the creation, modification, and/or deletion of records.
♦ Data transmission security; Electronic records should be protected from any tampering.
♦ Data output meets GLP/GMP requirements
Operating system with full touch screen
♦ Operation requirement is concise and clear, so customers can conveniently operate the balance and directly read the results on the screen to have a wonderful experience. At the same time, it is necessary to consider the special requirements of users in special industries, such as non-contact operation, etc.
Adopt automatic calibration and adjustment technology
♦ isoCAL automatic internal calibration and adjustment function, automatically triggered by temperature and time, fully ensure the accuracy of weighing results.
Adopt automatic door technology (optional)
♦ The technology of automatically opening and closing door is not only to improve customer experience satisfaction, but also necessary to consider the requirements of non-contact weighing in special industries, so as to achieve the goal of not contacting the balance during the weighing operation. Besides, The balance has a function of memorizing door position.
Fully automatic electrostatic removal technology (optional)
♦ Built-in ionizer can automatically eliminate the effect of static electricity on weighing
Built-in multi-applications
♦ Built-in multi-applications, print output, & data output meet GLP/GMP requirements
Standard communication interface
♦ Automatically identify the printer of D&T
♦ Standard RS232, easy to connect with peripherals
♦ PC connection function not only is easy to connect to PC, but also can directly transfer weighing data to spreadsheets (Excel)
Standard USB-C interface for data storage and export functions

Specification

Item	STB-206M	STB-506M	STB-3126M	STB-3156M	STB-316M
Max capacity(Max)	2.1g	5.1g	2.1g/31g	5.1g/31g	31g
Readability(d)	1μg	1μg	1μg/10μg	1μg/10μg	1μg
Repeatability(5% load ）					
Tolerance	2μg	2μg	2μg/10μg	2μg/10μg	2μg
Typical value	2.5μg	2.5μg	2.5μg/20μg	2.5μg/20μg	2.5μg
Repeatability （approx. 100% load ）					
Tolerance	1.5μg	2.5μg	2.5μg/15μg	2.5μg/15μg	2.5μg
Typical value	3μg	4μg	3μg/20μg	3μg/20μg	5μg
Linearity deviation					
Tolerance	2μg	2μg	2μg/10μg	2μg/10μg	2μg
Typical value	2.5μg	2.5μg	2.5μg/20μg	2.5μg/20μg	5μg
Off-center load deviation (positions according to OIML R76)					
Test weight	1g	2g	2g/20g	2g/20g	20g
Tolerance	2μg	2μg	2μg/10μg	2μg/10μg	2μg
Typical value	2.5μg	2.5μg	2.5μg/20μg	2.5μg/20μg	5μg
Sensitivity drift (+10℃ +30℃)	5 ppm/K	5 ppm/K	5 ppm/K	5 ppm/K	5 ppm/K

Specification

Item	STB-206M	STB-506M	STB-3126M	STB-3156M	STB-316M
Tare max capacity: ＜100% max capacity					
Accuracy class	Ⅰ （according to Directive 2014 | 31 | EU ）				
Verification scale interval(e) (according to Directive 2014 | 31 | EU)	10μg	10μg	10μg/100μg	10μg/100μg	10μg
Minimum load (according to Directive 2014 | 31 | EU)	1mg	1mg	1mg	1mg	1mg
Minimum initial weighing :according to USP(United States Pharmacopeia ） Chap. 41					
Optimum minimum initial weighing	0.82mg	0.82mg	0.82mg	0.82mg	0.82mg
Typical minimum initial weighing	1.3mg	1.3mg	1.3mg	1.3mg	1.3mg
Typical stabilization time	6s	6s	6s	6s	8s
Typical measurement time	8s	8s	8s	8s	12s
Recommended calibration weight					
External calibrated test weight	2g	5g	2g/20g	5g/20g	20g
Accuracy class (according to OIML R111 -1)	E1	E1	E1	E1	E1

Specification

Item	STB-206M	STB-506M	STB-3126M	STB-3156M	STB-316M
Dimensions					
L x W x H	90mm ×295mm ×150mm				
Weighing pan	Φ30 mm				
Weighing chamber height	80mm				
Net weight	approx. 4.7kg				
Ambient conditions					
Operation temperature	18℃~23℃				
Relative humidity	50%RH~75%RH				
Warm -up temperature fluctuation	≤1°C/h				
Power supply	100V -240VAC 50HZ/60HZ 1.0A -0.5A				