

7 Technical data

7.1 Specifications

7.1.1 Innova 2100

Tab. 7-1: Shaking

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|---------------------------------------|---|
| Speed | 25 – 500 rpm |
| Control accuracy | ±1 rpm |
| Indication | 3-Digit LED, in 1 rpm increments |
| Stroke/Orbit | 1.9 cm (¾ in) |
| Setpoint and control | Digital adjustment with PI microprocessor control and instantaneous visual feedback. |
| Operating ambient | 0 – 60 °C, 90 % humidity, non-condensing. Up to 2000 m. |
| Timer | <p>Programmable shaking periods from 0.1 to 99.9 hours by a digital timer that shuts off at the end of period and energizes status light.</p> <p>Timer counts down and digital display indicates remaining time. Can be deactivated for continuous operation. Additionally, unit will display total accumulated running time for service information.</p> |
| Alarms | Warning signal (audible and visual) indicates when shaking speed deviates more than 5 rpm from setpoint and when timed operation has expired. Audible alarm can be deactivated/activated by the operator. |
| LED display | Indicates speed, running time alarm conditions, and displays readout of internal clock (actual accumulated operating time). |
| Automatic restart | Automatic restart after power is restored, indicated by flashing display. |
| Setpoint retention | All setpoints and operating status are retained in non-volatile memory. |
| Drive | Triple-eccentric counterbalanced ball bearing drive. |
| Drive motor | 1/15 hp 3-phase brushless ball bearing DC motor. |
| Electrical | <p>100 V / 120 V / 220 V / 240 V</p> <p>All voltages 50/60 Hz, 80 VA.</p> <p>Universal power entry system adapts to U.S. or international requirements.</p> |
| Electrical protection | Main fuses in power entry module. Control circuits provided with separate fuse. |
| Dimensions | <p>Width: 48 cm (19 in) with knobs</p> <p>Depth: 55.5 cm (21 7/8 in)</p> <p>Height: 17 cm (6 ¾ in)</p> |
| Platform | 46 × 46 cm (18 × 18 cm) |
| Weight | <p>Net: 34.5 kg (76 lb)</p> <p>Gross: 54.5 kg (120 lb)</p> |
| Cabinet | Heavy gauge steel, phosphate coated, and texture painted. |
| Remote monitoring (optional) | 0 – 5 V chart recorder output for speed: 1 V per 100 rpm. Accuracy ±25 mV. |
| Temperature monitor (optional) | RTD digital temperature monitor displays individual flask or ambient temperature in 0.1 °C increments. Chart recorder output provided. |

Technical data

New Brunswick Digital Platform Shaker Innova® 2100/2150
English (EN)



At 25 – 400 rpm, the unit will perform to specifications with up to ± 10 % line voltage fluctuation. To attain speed accuracy at 401 – 500, the line voltage cannot be lower than 5 % of the rated voltage.



The Innova 2100 can be upgraded to a larger capacity platform with a kit that converts this shaker to an Innova 2150. This kit can be installed in the field.

7.1.2 Innova 2150

Tab. 7-2: Shaking

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| Speed | 25 – 500 rpm |
| Control accuracy | ± 1 rpm |
| Indication | 3-Digit LED, in 1 rpm increments |
| Stroke/Orbit | 1.9 cm ($\frac{3}{4}$ in) |
| Setpoint and control | Digital adjustment with PI microprocessor control and instantaneous visual feedback. |
| Operating ambient | 0 – 60 °C, 90 % humidity, non-condensing. Up to 2000 m |
| Timer | Programmable shaking periods from 0.1 to 99.9 hours by a digital timer that shuts off at the end of period and energizes status light. Timer counts down and digital display indicates remaining time. Can be deactivated for continuous operation. Additionally, unit will display total accumulated running time for service information. |
| Alarms | Warning signal (audible and visual) indicates when shaking speed deviates more than 5 rpm from setpoint and when timed operation has expired. Audible alarm can be deactivated/activated by the operator. |
| LED display | Indicates speed, running time alarm conditions, and displays readout of internal clock (actual accumulated operating time). |
| Automatic restart | Automatic restart after power is restored, indicated by flashing display. |
| Setpoint retention | All setpoints and operating status are retained in non-volatile memory. |
| Drive | Triple-eccentric counterbalanced ball bearing drive. |
| Drive motor | 1/15 hp 3-phase brushless ball bearing DC motor. |
| Electrical requirements | 100 / 120 / 220 / 240 VAC, 50/60 Hz. 35 VA universal power entry system adapts to U.S. or international needs. |
| Electrical protection | Main fuses in power entry module. Control circuits provided with separate fuse. |
| Dimensions | Width: 48 cm (19 in) Depth: 55.5 cm (21 $\frac{1}{4}$) Height (to platform surface): 17 cm (6 $\frac{3}{8}$ in) |
| Platform | 46 × 61 cm (18 × 24 in) |
| Weight | Net: 36 kg (80 lb) Gross: 57 kg (125 lb) |
| Cabinet | Heavy gauge steel, phosphate coated and texture painted. |

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|---------------------------------------|--|
| Remote monitoring (optional) | 0 – 5 V chart recorder output for speed: 1 V per 100 rpm. Accuracy ± 25 mV. |
| Temperature monitor (optional) | RTD digital temperature monitor displays individual flask or ambient temperature in 0.1 °C increments. Chart recorder output provided. |



At 25 – 400 rpm, the unit will perform to specifications with up to ± 10 % line voltage fluctuation. To attain speed accuracy at 401 – 500 rpm, the line voltage cannot be lower than 5 % of the rated voltage.