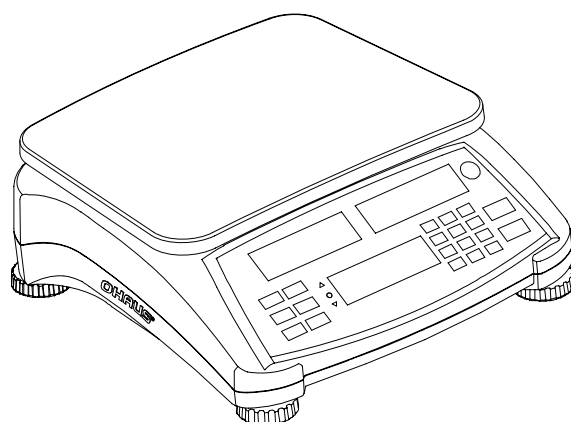
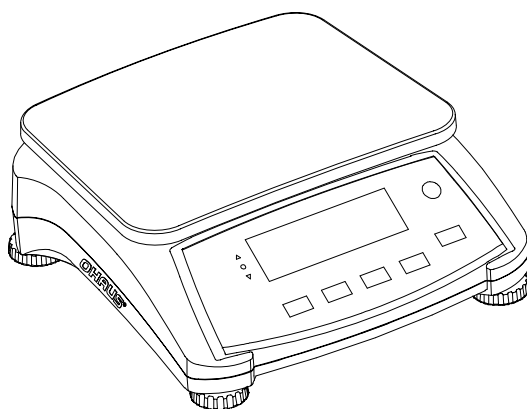




SERVICE MANUAL

RANGER™ 3000 &

RANGER™ Count 3000 Scales



Ohaus Corporation, 7 Campus Drive, Suite 310, Parsippany, NJ 07054 (973) 377-9000

CHAPTER 1 GETTING STARTED

1.4 SPECIFICATIONS

Complete specifications for the Ohaus Ranger 3000 and Ranger Count 3000 scales are listed in Table 1-1. When a scale has been serviced, it must meet the specifications listed in the table. Before servicing the scale, determine what specifications are not met.

TABLE 1-1. SPECIFICATIONS

Model	R31P(E)1502 RC31P1502	R31P(E)3 RC31P3	R31P(E)6 RC31P6	R31P(E)15 RC31P15	R31P(E)30 RC31P30
Capacity	1.5 kg 3 lb	3 kg 6 lb	6 kg 15 lb	15 kg 30 lb	30 kg 60 lb
Min (20e)	0.01kg	0.02kg	0.04kg	0.1kg	0.2kg
	0.02lb	0.04lb	0.1lb	0.2lb	0.4lb
Standard readability d=	0.00005 kg 0.0001 lb	0.0001 kg 0.0002 lb	0.0002 kg 0.0005 lb	0.0005 kg 0.001 lb	0.001 kg 0.002 lb
LFT ON readability e=10d=	0.0005 kg 0.001 lb	0.001 kg 0.002 lb	0.002 kg 0.005 lb	0.005 kg 0.01 lb	0.01 kg 0.02 lb
Standard Resolution	1:30000	1:30000	1:30000	1:30000	1:30000
LFT ON Resolution (nMax)	1:3000	1:3000	1:3000	1:3000	1:3000
Linearity 2d	±0.0001 kg	±0.0002 kg	±0.0005 kg	±0.001 kg	±0.002 kg
Repeatability 2d	±0.0001 kg	±0.0002 kg	±0.0005 kg	±0.001 kg	±0.002 kg
Hysteresis 2d	±0.0001 kg	±0.0002 kg	±0.0005 kg	±0.001 kg	±0.002 kg
Off Center Load 2d	±0.0001 kg	±0.0002 kg	±0.0005 kg	±0.001 kg	±0.002kg
Creep (60s, 2d)	±0.0001 kg	±0.0002 kg	±0.0005 kg	±0.001 kg	±0.002 kg
Creep (30 min. 0.5e) MPE	±0.0002 kg	±0.0005 kg	±0.001 kg	±0.002 kg	±0.005 kg
Stabilization Time	1 sec.	1 sec.	1 sec.	1 sec.	1 sec.
Combined effect (Increasing / Decreasing Load)	MPE	MPE	MPE	MPE	MPE
Zero Drift vs. Temp 2d/°C	±0.0001 kg / °C	±0.0002 kg / °C	±0.0005 kg / °C	±0.001 kg / °C	±0.002 kg / °C
Span Drift vs. Temp 1d/°C, Less or equal than MPE	±16.7ppm / °C	±16.7ppm / °C	±16.7ppm / °C	±16.7ppm / °C	±16.7ppm / °C
Operating Conditions	-10°C to 40°C	-10°C to 40°C	-10°C to 40°C	-10°C to 40°C	-10°C to 40°C
Storage Temperature	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C
Pan Size	225 x 300 mm	225 x 300 mm	225 x 300 mm	225 x 300 mm	225 x 300 mm