

Bantam Plus

**Best in Class
Innovative Solution**

**Portable 50 Amp
Three-phase Meter
and CT Site Test
Solution**



Safe - Accurate - Versatile



Bantam Plus

Innovative Meter Site Testing Solution

Portable at 30lb Weight

Automated Test Socket

Synthesized Voltage &
50 Amp Current Source

Optional CT Burden and
Ratio Testing

WATT-Net Software Data
Management

6.5 LCD Touch Screen

Designed for Operator
Safety

Embedded RD 0.02%,
0.04% Reference
Standard

Optional Analog Testing

Integrated Optics

***Radian sets benchmark for on-site testing –
No other product can offer the accuracy &
functionality in a compact portable solution.***

Guided by customer involvement the Bantam Plus is engineered from concept through completion to be the most technologically and complete solution in portable three-phase meter site testing. Bantam Plus is an innovative solution that supplies a safe, accurate and highly versatile answer to the diverse test requirements of today's electric metering site.



Power and Energy Measurement Specialists

Bantam Plus combines the accuracy of the embedded Radian Standard with the versatility of WECO software.

The versatility of the Bantam Plus easily adapts to your testing methods. The automated socket provides convenient Meter Form selection, if meter removal is a challenge; simply plug in the optional RB-MTA adaptor to connect to the site test interface switches. The integrated Optics offer a convenient test solution in a single package, but should you wish to bypass simply connect optional optics to one of the three Bantam Plus I/O ports.

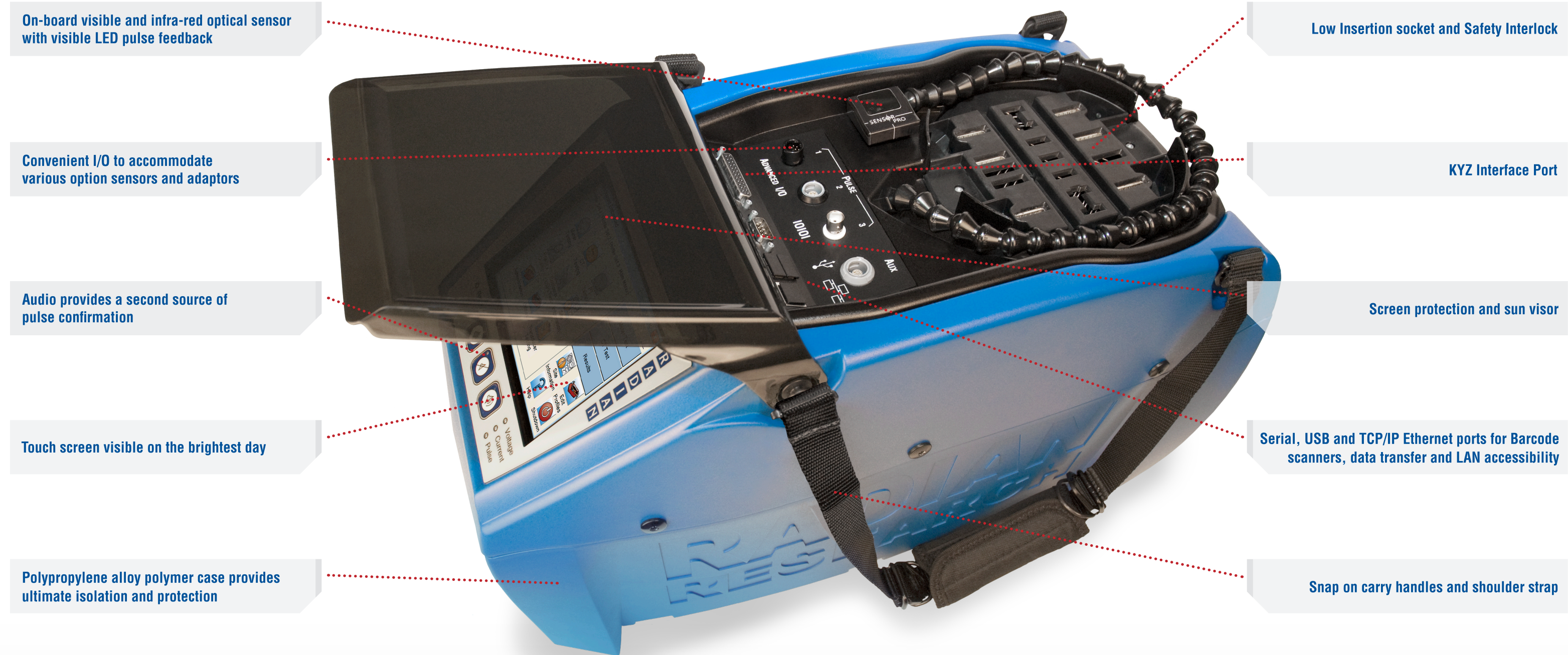
Site Meter testing has never been easier; a meter test can be initiated by selecting one of 30 user programmed meter profiles. The Bantam Plus software user interface will be familiar to most operators. Running Winboard Embedded, on a *Microsoft Windows Operating system, you have the look and feel of a WECO shop test board.

No need to write down test records, the Bantam Plus maintains site information on its integrated hard drive for later transfer of data to your WATT-Net database or MDM software maximizing throughput allowing the operator to test more sites per day.

* Microsoft Windows is a registered trademark of Microsoft Corporation.



Bantam Plus | *The most complete meter-site tester puts functionality at your finger tips!*



On-board visible and infra-red optical sensor with visible LED pulse feedback

Convenient I/O to accommodate various option sensors and adaptors

Audio provides a second source of pulse confirmation

Touch screen visible on the brightest day

Polypropylene alloy polymer case provides ultimate isolation and protection

Low Insertion socket and Safety Interlock

KYZ Interface Port

Screen protection and sun visor

Serial, USB and TCP/IP Ethernet ports for Barcode scanners, data transfer and LAN accessibility

Snap on carry handles and shoulder strap

Expand Bantam Plus capabilities with a wide selection of accessories



RM-1S

The **RM-1S Remote Reset Switch** is a normally closed push button switch. The push-button has a tactile feel to provide instantaneous feedback of switch actuation.



RB-TSJ

Test Switch Current Jumper Kit
(Supplied with RB-TRSR1)

RB-MAG

Magnetic Mount Optics Kit



RB-SCRN

RB-2x Replacement Screen Shield
Damaged or badly scratched screen protectors are field replaceable.



RB-SMK

RB-2x Socket Maintenance Kit
Contains pack of six field replacement socket assemblies and one Torx drive.



RB-BAG

Nylon Accessories Bag
12(L) x 8(H) x 5(W)

RB-BPH

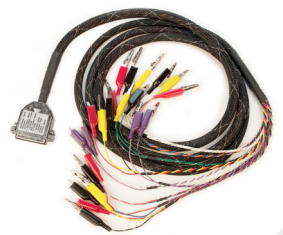
Back pack harness.



RB-SCA

RB-2x to RD-2x Standards Compare Adapter

Used to interface with an external RD for calibration purposes.



RB-KYZIO

Advance I/O KYZ Breakout Cable
Connects to Bantam Plus KYZ port.



RB-BARCODE

Serial Barcode Scanner

Collect Meter Faceplate information and run meter tests automatically from a barcode scanner.



RB-IR

110165
Solid State IR Optics Probe Assembly with suction cup attachment based optics.



RB-IR

110166
Solid State IR Optics Probe Assembly with magnetic attachment based optics.

Have special meter site requirements? Bantam Plus accessories can provide the solution!



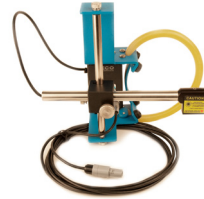
RB-MSA
Meter Socket Safety Power Adapter
Simply pull the meter and insert the safety adapter into the exposed meter socket. Adapter faceplate voltage banana sockets provide easy access to service voltage.



RB-FPC-Supplied with RB-20
RB-2x Field Power Cable
An eight foot length of three core cable terminated with alligator clips and banana plugs to connect to meter socket service volts.



RB-MTA
Meter Test Adapter
An assembly that plugs into the Bantam Plus meter socket and delivers voltage and current (20 Amps max) to the meter test socket.



RB-IRDS
IR /Visible LED/Laser Disk Sensor, Band Mount
The most versatile three in one meter pulse sensor assembly enables meters to be tested in the socket.



RB-OPTOCM
OPTOCOM Optics Kit – Port 1
Used for meters that requires communication via Optocom interface.



RB-MOUNT
Frame mount for Mechanical meter orientation and truck mount capability.



RB-TSBR1
Test Switch Interface Adapter with Burden and Ratio Testing
An adapter that plugs into the Bantam meter socket. Provides access to clamp probes and direct secondary current for CT measurement.



RB-MECH
Mechanical Meter Socket Adapter
90 Degree Adapter for electro-mechanical meters.

Power and Energy Measurement Specialists

Specifications

General

Protection	Breaker ON/OFF Switch, 5 A
Operation Range	<i>Aux Power</i> 90-300 VAC (autoranging), 500 W Max <i>Frequency</i> 45-65 Hz (fundamental) <i>Dimensions</i> 370 mm x 260 mm x 520 mm (14.4" x 10.2" x 20.4") <i>Weight</i> 30.5 lbs (13.84 kg)
Environment	<i>Humidity</i> 5% to 95%, non-condensing <i>Operating Temperature</i> -10 to 50 C <i>Storage Temperature</i> -20 to 70 C
Display	6.5 Inch Touch Screen, Color Back Lit LCD, 640 x 480
Communications	2 USB Ports 1 Ethernet 10/100 Port 1 RS-232 Com Port 1 Optical Communication Port Analog Sense Port - Requires RB-20AS or RB-21AS
Supported Meter Forms	1S, 2S, 3S, 4S, 5S, 6S, 8S (electronic), 9S, 10S, 12S, 13S, 14S, 15S, 16S, 25S, 26S, 29S, 35S, 36S, 45S, 46S, 56S, 66S, 96S

Output Source

Voltage	<i>Output</i> 20-480 VAC <i>Resolution</i> 10 mV <i>Voltage Source Accuracy</i> 0.25% + 10 mV true RMS <i>Voltage Harmonic Distortion</i> <1% Resistive load <i>Harmonic Generation Capability</i> 50 th order
Current	<i>Output</i> 0.1-50 A <i>Resolution</i> 1 mA <i>Compliance</i> 60 VA <i>Current Source Accuracy</i> 0.25% + 1 mA true RMS <i>Current Harmonic Distortion</i> <1%, Resistive load <i>Harmonic Generation Capability</i> 50 th order

Measurement Specifications

Function	Reading	Accuracy (ppm) ^{1, 2}		Temperature Coefficient ⁴ (ppm/° C)	Notes:
		RB-20	RB-21		
Power/Energy ^{2, 3}	250 mA to 50 A	400	200	10	100 ppm = 0.01% 1 TCAL = 23° C 2 Includes Variables of Stability, Power Factor, and Traceability Uncertainty, 20° C to 30° C 3 For > 1 second test 4 -10° C to 20° C, 30° C to 50° C
Power Factor	>0.5	400	200		
Phase Angle	<0.5 0° to 360°	400/2PF 0.012°	200/2PF 0.006°		

Ordering Information:

Available models, (RB-20 class 0.04%), (RB-21AS (Analog Sense), RB-21 class 0.02%)

Radian Research, Inc.
www.radianresearch.com

3852 Fortune Drive
Lafayette, Indiana 47905

phone 765-449-5500
fax 765-448-4614

