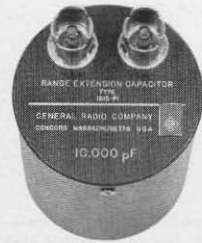


RANGE EXTENSION OF THE TYPE 1615-A CAPACITANCE BRIDGE

In the TYPE 1615-A Capacitance Bridge the largest standard capacitor is 1000 pf, and the largest ratio in the transformer ratio arms is 1000:1. The bridge can, therefore, measure unknown capacitors up to 1.11110 μ f. The range of the bridge can be extended upward continuously through another decade to 11.11110 μ f by the use of an external standard capacitor of 10,000 pf.

The TYPE 1615-P1 Range-Extension Capacitor is a 10,000-pf mica capacitor, designed for easy connection and adjustment to extend the range of the bridge to 11 μ f.

The bridge has EXT STANDARD terminals to which this capacitor can be connected and an eleven-position rotary switch, which connects the capacitor to



the transformer taps to provide the same steps of adjustment in the external decade which the levers provide for internal standards.

This capacitor is not a calibrated standard. It is to be adjusted in terms of the standards in the bridge, by means of its variable trimmer capacitor, for either two- or three-terminal operation.

Dimensions: Diameter 3-1/16 by length 4 7/8 inches (78 by 125 mm).

Net Weight: 1 pound (0.5 kg).

Type		Code Number	Price
1615-P1	Range-Extension Capacitor.....	1615-9601	\$35.00

TYPE 1633-P1 RANGE-EXTENSION UNIT

The TYPE 1633-P1 Range-Extension Unit can be used with the TYPE 1633-A Incremental-Inductance Bridge to extend the current ratings to 50 amperes. It connects a 250-watt, 0.1-ohm resistor in parallel with one of the bridge arms.

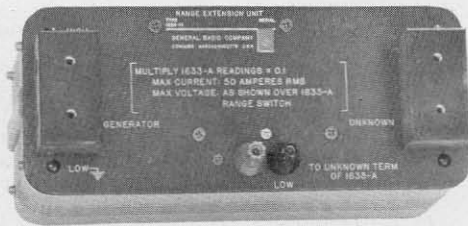
High-current terminals capable of accommodating leads up to 1/4 inch in diameter are provided on the range-extension unit for the generator and unknown. A cable is furnished for connection to the bridge.

When the range-extension unit is con-

needed, the operation of the bridge is unchanged, but only the *a*, *b*, and *c* ranges can be used. Bridge readings must be multiplied by 0.1. The upper limit of measurement is 100 mh up to 120 cps and 10 mh up to 1 kc.

The use of the TYPE 1633-P1 Range-Extension Unit at frequencies up to 400 cps can cause up to 1% additional error in the bridge readings. Correction can be made for the larger error occurring at higher frequencies. The temperature coefficient of the resistor is less than 20 ppm per degree Centigrade.

Any current up to 30 amperes continuous, or 50 amperes intermittent, ac or dc, can be used. Continuous operation at 50 amperes without forced-air cooling is not recommended.



Dimensions: Width 10 1/2, height 4 1/4, depth 5 inches (270 by 110 by 130 mm).

Net Weight: 5 1/4 pounds (2.4 kg).

Type		Code Number	Price
1633-P1	Range-Extension Unit.....	1633-9601	\$125.00