



Model BIT 4886 - 16 BIT Control

### BIT MODEL TABLE

SUFFIX(1)	MODEL(2)	DATE FORMAT	RESOLUTION		INPUT
			PRINCIPAL CHANNEL	LIMIT CHANNEL	
-4882	BIT 4882 BIT 4882-F	GPIO	12 bits (binary)	12 bits (binary)	Talk-listen IEEE 488.2
-4886	BIT 4886	GPIO	16 bits (binary)	16 bits (binary)	Talk-listen IEEE 488.2
-TMA	BIT TMA-27	2-Wire serial	12 bits (binary)	12 bits (binary)	Talk-listen Serial bus (3)
-488-B	BIT 488-B	ASCII/Hex	12 bits (binary)	8 bits (binary)	Listen-only IEEE 488
-488-D	BIT 488-D	ASCII/Decimal	3-digit (BCD)	2-digit (BCD)	Listen-only IEEE 488
-232	BIT 232 BIT232-F	Serial: 8 data bits, no parity bit, 1 stop bit	—	—	Talk-listen RS 232-C

(1) Add to model No. of the BOP to specify a factory-installed interface.

(2) Use this designation when ordering separately for field installation.

(3) Kepco's single address, multiple instrument bus.

### BIT GENERAL SPECIFICATIONS

Output Voltage (Main channel)	High range	0 to $\pm 10V$
	Low range	0 to $\pm 1.0V$
Output Voltage (Limit channel)		0 to $+ 10V$
Output Current (Each channel)		$\pm 2.0mA$ max
Output Impedance		$<0.05$ ohms
Linearity Error (0 to $+70^{\circ}C$ )		$\pm \frac{1}{2}$ LSB (1)
Temperature Coefficient	Full scale	$\pm 35$ PPM/ $^{\circ}C$ max
	Zero, high range	$\pm 20\mu V/^{\circ}C$ max
	Zero, low range	$\pm 10\mu V/^{\circ}C$ max
Source Power		Supplied by host power supply
Shipping Weight		3lb (1.4Kg)

(1)  $\pm 1$  LSB for BIT 4886.

The Kepco bipolar power supplies in the 100W, 200W and 400W series are designed to accept a variety of internal digital interface cards.

Talk-listen support for the IEEE 488.2 bus using SCPI is afforded by two plug-in cards: BIT 4882 is 12-bit with resolution of  $1/2^{12}$ ; BIT 4886 is 16-bit with resolution of  $1/2^{16}$ . These cards allow BOP to communicate as a stand-alone instrument, directly on the GPIO.

Long range 2-wire serial control on a talk-listen basis is offered by the BIT TMA-27 card. This card enables the BOP to communicate as one of up to 27 power supplies on a 300M long 2 wire serial bus. This bus is the inter-model bus that Kepco uses for MAT and MST power supplies. It provides single address, multi-instrument control from any GPIO controller or from VXI or directly from a PC (with TMA PC-27 card).

The simplest are listen-only ASCII cards that will receive instructions on the IEEE 488 bus in either hexadecimal (B-series) or BCD (D-series). Three digit resolution (12- bits) is offered for the principal control and 2 digit (8-bits) for the limit control. To specify as a factory-installed option append suffix -488B or -488D or order for field installation as models BIT 488B or BIT 488D.

BIT 232 provides an RS 232 port for direct communication with a PC's serial ports. Baud rate is 9600, no parity, 8 data bits and 1 stop bit with 12 bits of resolution.



BIT are CE marked per the Low Voltage Directive (LVD), EN61010-1.