

A pre-configured CalBench for the calibration of electrical, temperature and pressure instrumentation



## **About the Package**

The CBP-WW3 CalBench is a package for testing and calibrating electrical, pressure, and temperature instrumentation. The selection of modules and accompanying products provide users with a flexible and high performance workstation. It can be operated manually or utilised for software driven calibration.

- Heavy duty CalBench system for process instrumentation calibration
- Process calibrator module with 6.5 digit multimeter and PC control centre
- Source and measure voltage, current, resistance, frequency and more
- Benchtop electrical multifunction calibrator for meter calibration
- Control centre operated oscilloscope and function generator modules
- $\bullet$  RTD & thermocouple simulation and measurement, HART communication
- $\bullet$  Regulated pressure calibration modules for vacuum to 7 bar and 0 to 20 bar
- Precision pressure measurement modules for pneumatic & hydraulic calibration
- Benchtop pumps, pressure adaptor kit, manifold and electrical vacuum pump
  Fixed and variable DC power supply modules for powering devices under test
- Dry block calibrator for temperature sourcing, automatic control via EasyCal
- Automated calibration using EasyCal software with printers and extras supplied
- Storage solutions include 4 drawer unit, under bench holder, perfo panel fittings

# **Calibration Capabilities**

#### Pressure

Gauges, calibrators, transducers, transmitters, indicators, switches, valves, controllers, manometers, chart recorders.

### **Temperature**

Temperature sensors, indicators, thermocouple and RTD transmitters, recorders, controllers, thermometers, process calibrators, PRTs, thermistors.

# Electrical / Electronic

Multimeters, AC/DC signal sources, clamp meters, data loggers, tachometers, ohmmeters, decade boxes, conductance meters, power meters, watt meters, tachometers.





**CBP-WW3: Wide Workload CalBench Package**A pre-configured CalBench for the calibration of electrical, temperature and pressure instrumentation

Item#	Qty	Code	Basic Description	Basic Purpose
1	1	7080-HD	CalBench Heavy Duty Version (W 2000 x D 850 x H 1568 mm) Framework bench style with worktop, perforated panel, primary console with 7082 mains power controller module.	Provides an ergonomic workspace for various calibration applications. Modules below to be fitted to the primary console for testing workload.
2	1	7125	Perfo Panel Option: 20 piece Tool Hook Kit	For holding various tools and accessories.
3	1	7139	Perfo Panel Option: Shelf (W 450 x D 250 x H 130 mm)  Perfo Panel Option: Storage Bin Strip (W 450 x H 75 mm)	Suitable for storing equipment and tools.
4	1	7141	Supplied with 4 x 1 L bins.	For storage of components and small tools.
5 6	1	7124 7123	4 Drawer Unit (W 525 x D 550 x H 600 mm)  CPU/Dry Block Calibrator Holder	For storage of equipment, tools, documents etc.  For storing dry block calibrators when not in use.
7	1	8060+	Process Calibrator and Control Centre Module Advanced system package for precision source and measure capabilities. Integral process calibrator, 6.5 digit multimeter, PC and EasyCal software. Operation via 12.1" touch screen display. Built-in communication with compatible modules.	Source and measure process signals for electrical, frequency, temperature. Enables users to calibrate process instrumentation like transmitters, RTDs, thermocouples and more. EasyCal software and accessories included for automation, administration and certificate generation.
8	1	CCPAD	Control Centre Numeric Keypad Module with jog dial	Ergonomic method of data entry to EasyCal software.
9	1	CCSCOPE-2208B	Control Centre Integral Oscilloscope (2 channel) 100 MHz with connection module, control centre operation.	For basic R&M and testing applications, fault finding and diagnostic work.
10	1	CC-AFG20	Control Centre Integral Function Generator 20 MHz with connection module, control centre operation.	Used to generate different types of electrical waveforms over the frequency range, and frequency measurement for fault diagnostics and repair work.
11	1	RMTEG-CV7b/0.02	Digital Pressure Gauge Module with Regulator Vacuum to 7 bar (100 psi), 0.02 % FS accuracy.	For pneumatic calibration from vacuum to 7 bar (100 psi), used with the 7149 electrical vacuum pump and external air supply. Can be used manually with pump also.
12	1	RMTEG-G20b/0.02	Digital Pressure Gauge Module with Regulator 0 to 20 bar (300 psi), 0.02 % FS accuracy.	For mid range pneumatic work, with a line supply typically from a gas cylinder. Regulated output with precision digital gauge for reference calibration. Can be used manually with pump also.
13	1	XTEG-G100b/0.02/M	Pressure Measurement Module with Control Centre Interface 0 to 100 bar (1500 psi), 0.02 % FS accuracy.	For mid/high range pneumatic calibration work. Used with 7194A pump.
14	1	XTEG-G200b/0.02/M	Pressure Measurement Module with Control Centre Interface 0 to 200 bar (3000 psi), 0.02 % FS accuracy.	For high range pneumatic calibration work. Used with 7194A pump.
15	1	XTEG-G700b/0.02/M	Pressure Measurement Module with Control Centre Interface 0 to 700 bar (10,000 psi), 0.02 % FS accuracy.	For hydraulic calibration with accompanying pump.
16	1	7056	Dual Adjustable Power Supply Module 2 x 30 V DC 3 A.	A variable DC supply to supplement various applications.
17	1	7087	Quad DC Power Supply Module 6 V (20 A), 12 V (10 A), 24 V (6 A), 48 V (3 A).	Provides a DC power supply to various loop instrumentation under test.
18	1	7076	Fixed 110 V AC Power Supply Module 110 V AC up to 8 A, 2 mains sockets & 4 mm safety sockets.	Provides a 110 V AC output on 230 V AC CalBenches, meaning US type products can be powered and used.
19	1	7149	Electrical Vacuum Pump	Provides a vacuum that connects to the RMTEG-CV7b module, enabling regulation for negative pressure calibration work.
20	1	7149-HCO	Housing and Connectivity Option for the 7149 vacuum pump	Compact housing for the 7149 pump, situated under bench. Sound proofed and power control via 7082 module on CalBench.
21	1	7161-VLP	Benchtop Pneumatic Pressure Calibration Manifold with Vernier Dual port for use from vacuum to 40 bar (600 psi).	Provides a convenient UUT connection on the bench. Used with the RMTEG modules for calibration of pressure devices.
22	1	7115	Contamination Trap For pneumatic use from vacuum to 200 bar (3000 psi).	To protect pressure calibrators and controllers against impurities and residues released by pressure instrumentation under test.
23	1	7195	Benchtop Hydraulic Pressure Calibration Pump Vacuum to 700 bar (10,000 psi).	Hydraulic pressure to 700 bar. Used with MTEG-G700b module, with a dual output manifold for both UUT & module connection.
24	1	7194A	Benchtop Pneumatic High Pressure Calibration Pump Vacuum to 200 bar (3000 psi).	Pressure generation to 200 bar. Used with MTEG-G200b module, with a dual output manifold for both UUT & module connection.
25	1	7198	Pressure Calibration Accessories Kit A comprehensive selection of fittings, adaptors and hoses.	Provides all the required pressure connections and fittings for modules and pumps to UUTs.
26	1	8100	Instrumentation Test Stand	For positioning of UUTs like transmitters & gauges on benchtop.
27	1	5025E-S2	Benchtop Electrical Multifunction Calibrator AC/DC 1050 V / 22 A, variable resistance, Pt100 simulation, thermocouple simulation, conductance, capacitance, power calibration, 10 MHz digital frequency.	Source & simulation of signals for electrical, electronic, frequency, temperature calibration. Enables users to test and verify process and electrical instruments like sensors, multimeters, clamp meters and more.
28	1	9780	Clamp Meter Adaptor	Used with 5025E to calibrate clamp meters.
29 30	1	9773 8072	Optical Tacho Adaptor  Dry Block Calibrator (28 to 660 °C) with metric multi hole insert	Used with 5025E to calibrate optical tachometers.  Temperature source for the calibration of probes, RTDs, and
31	1	8072-METP	(1x3,2x4,1x5,1x6,1x9 mm), blank insert, EasyCal software driver.  Pack of 16 Metric Inserts for 8072: 3 mm to 20 mm holes	more. Automated operation with 8060+ and EasyCal software.  Inserts for use with different probe sizes, used with 8072.
32	1	8002	CalBench Environmental Monitoring System	Measures and logs temperature, relative humidity and barometric pressure, with control centre interface.
33	1	CERTS	Traceable Calibration Certificates. For all test modules and additional test equipment.	Certifies all calibration modules and additional test instruments have been tested in the TE factory to international standards.