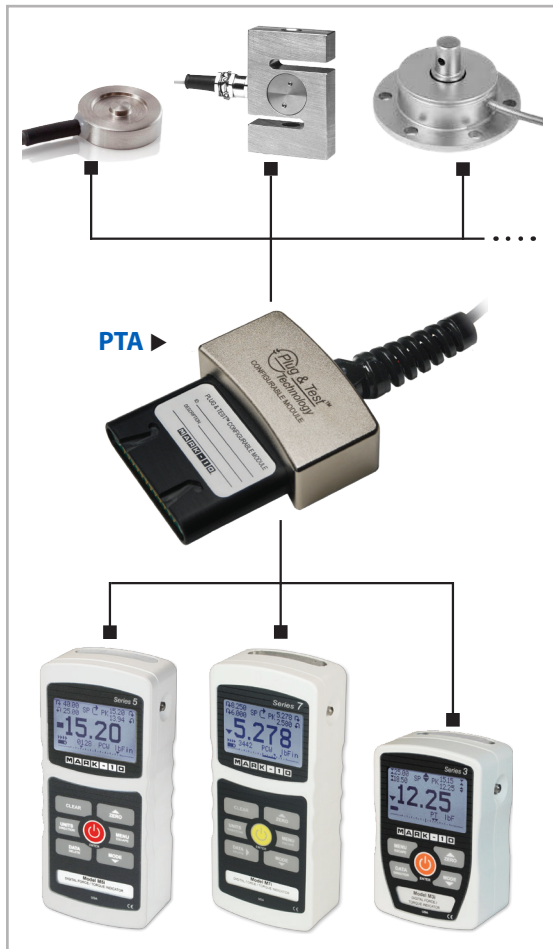




Connect common strain gage-based load cells, force sensors, and torque sensors to Models M7I, M5I, and M3I indicators and Series F test frames with these user-configurable adapters.

Sensor capacity and resolution may be configured via an included software utility, which includes a library of common force capacities from 0.12 to 750,000 lbF (0.5 N to 4,000 kN), and torque capacities from 10 ozFin to 40,000 lbFft (7 Ncm to 57,000 Nm). An identification number may be configured, which is displayed upon indicator power-up or the indicator's Information screen.

Through Plug & Test® technology, all configuration and calibration information is saved within the adapters. This flexibility allows for interchangeability between multiple sensors with any Mark-10 indicator or Series F test frame.



^ Model PTA (center) adapts customer-supplied force and torque sensors to Mark-10 indicators



^ Model PTAF adapter and Model AC1083 adapter are shown with a customer-supplied force sensor and Model M5I indicator



^ Model PTAF is shown with a customer-supplied force sensor on a Series F test frame

## Features

- Compatible with strain gage-based load cells, force sensors, and torque sensors
- Screw terminal block allows for easy connection of sensor wires
- Configure sensor capacity, resolution, and identification number via included software utility
- Program the adapter via USB or RS-232 through the indicator
- Supplied with a strain relief, user-writeable identification label



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 Toll-free: 888-MARK-TEN ■ Tel: 631-842-9200 ■ Fax: 631-842-9201

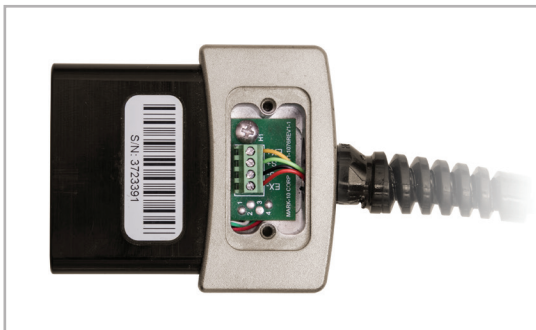


## Requirements

- **Sensor type: Full bridge**
- **Sensor resistance: 300 - 1000 ohms**
- **Sensor sensitivity: 1 - 3 mV/V full scale**
- **PTA: Mark-10 indicator with firmware version 1.0.9 or later**  
**PTAF: Mark-10 indicator with firmware version 2.2.8 or later**

## Wire Connection

Easily connect sensor wires via screw terminal blocks. No soldering or special tools required.



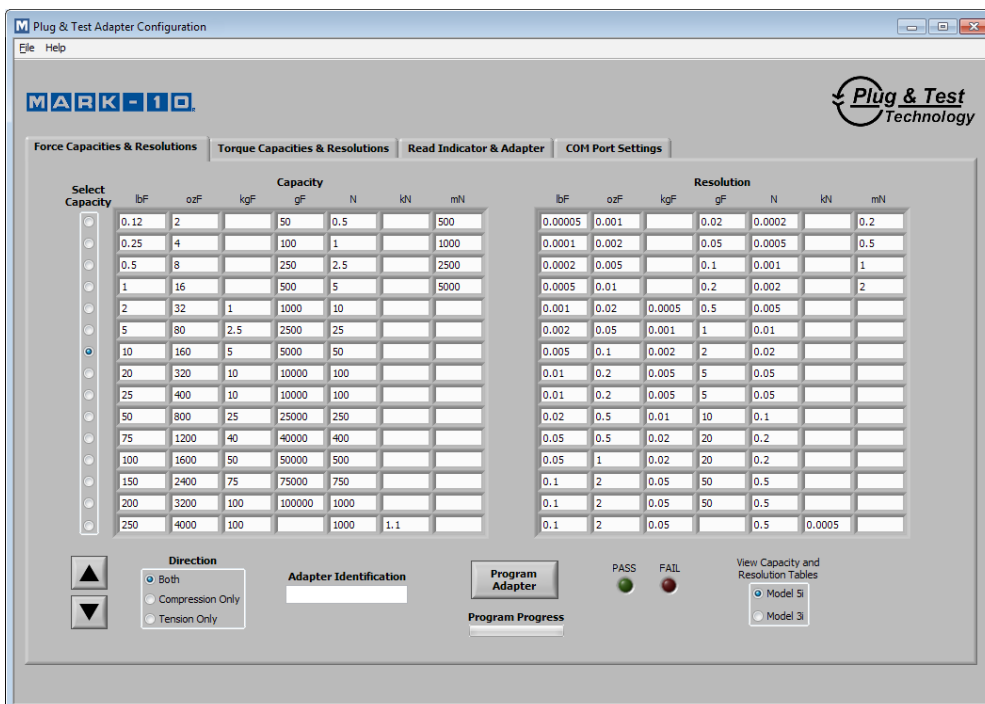
^ Model PTA



^ Model PTAF

## Software Utility

Configure capacity, resolution, and identification number via USB through any Mark-10 indicator. Select from an extensive library of common force and torque capacities.



## Available Force Capacities & Resolutions

Capacity									Resolution With Models M7I & M5I indicators and IntelliMESUR® software								Resolution With Model M3I indicator					
lbF	ozF	kgF	gF	N	kN	mN	T*	t*	lbF	ozF	kgF	gF	N	kN	mN	T*	t*	lbF	kgF	gF	N	kN
0.12	2	-	50	0.5	-	500	-	-	0.00005	0.001	-	0.02	0.0002	-	0.2	-	-	0.0001	-	0.05	0.0005	-
0.25	4	-	100	1	-	1000	-	-	0.0001	0.002	-	0.05	0.0005	-	0.5	-	-	0.0002	-	0.1	0.001	-
0.5	8	-	250	2.5	-	2500	-	-	0.0002	0.005	-	0.1	0.001	-	1	-	-	0.0005	-	0.2	0.002	-
1	16	-	500	5	-	5000	-	-	0.0005	0.01	-	0.2	0.002	-	2	-	-	0.001	-	0.5	0.005	-
2	32	1	1000	10	-	-	-	-	0.001	0.02	0.0005	0.5	0.005	-	-	-	-	0.002	0.001	-	0.01	-
5	80	2.5	2500	25	-	-	-	-	0.002	0.05	0.001	1	0.01	-	-	-	-	0.005	0.002	-	0.02	-
10	160	5	5000	50	-	-	-	-	0.005	0.1	0.002	2	0.02	-	-	-	-	0.01	0.005	-	0.05	-
20	320	10	10000	100	-	-	-	-	0.01	0.2	0.005	5	0.05	-	-	-	-	0.02	0.01	-	0.1	-
25	400	10	10000	100	-	-	-	-	0.01	0.2	0.005	5	0.05	-	-	-	-	0.02	0.01	-	0.1	-
50	800	25	25000	250	-	-	-	-	0.02	0.5	0.01	10	0.1	-	-	-	-	0.05	0.02	-	0.2	-
75	1200	40	40000	400	-	-	-	-	0.05	0.5	0.02	20	0.2	-	-	-	-	0.1	0.05	-	0.5	-
100	1600	50	50000	500	-	-	-	-	0.05	1	0.02	20	0.2	-	-	-	-	0.1	0.05	-	0.5	-
150	2400	75	75000	750	-	-	-	-	0.1	2	0.05	50	0.5	-	-	-	-	0.2	0.1	-	1	-
200	3200	100	100000	1000	-	-	-	-	0.1	2	0.05	50	0.5	-	-	-	-	0.2	0.2	-	2	-
250	4000	100	-	1000	1	-	-	-	0.1	2	0.05	-	0.5	0.0005	-	-	-	0.2	0.2	-	2	-
300	4800	150	-	1500	1.5	-	-	-	0.2	5	0.1	-	1	0.001	-	-	-	0.5	0.2	-	2	-
500	8000	250	-	2500	2.5	-	-	-	0.2	5	0.1	-	1	0.001	-	-	-	0.5	0.2	-	2	-
750	12000	400	-	4000	4	-	-	-	0.5	10	0.2	-	2	0.002	-	-	-	1	0.5	-	5	-
1000	16000	500	-	5000	5	-	-	-	0.5	10	0.2	-	2	0.002	-	-	-	1	0.5	-	5	-
1500	24000	750	-	7500	7.5	-	-	-	1	20	0.5	-	5	0.005	-	-	-	2	1	-	10	-
2000	-	1000	-	-	10	-	1	1	1	-	0.5	-	-	0.005	-	0.0005	0.0005	2	1	-	-	0.01
2500	-	1000	-	-	10	-	1	1	1	-	0.5	-	-	0.005	-	0.0005	0.0005	2	1	-	-	0.01
3000	-	1500	-	-	15	-	1.5	1.5	2	-	1	-	-	0.01	-	0.001	0.001	5	2	-	-	0.02
5000	-	2500	-	-	25	-	2.5	2.5	2	-	1	-	-	0.01	-	0.001	0.001	5	2	-	-	0.02
7500	-	4000	-	-	40	-	4	4	5	-	2	-	-	0.02	-	0.002	0.002	10	5	-	-	0.05
10000	-	5000	-	-	50	-	5	5	5	-	2	-	-	0.02	-	0.002	0.002	10	5	-	-	0.05
15000	-	7500	-	-	75	-	7.5	7.5	10	-	5	-	-	0.05	-	0.005	0.005	20	10	-	-	0.1
20000	-	10000	-	-	100	-	10	10	10	-	5	-	-	0.05	-	0.005	0.005	20	10	-	-	0.1
25000	-	10000	-	-	100	-	10	10	10	-	5	-	-	0.05	-	0.005	0.005	20	10	-	-	0.1
30000	-	15000	-	-	150	-	15	15	20	-	10	-	-	0.1	-	0.01	0.01	50	20	-	-	0.2
50000	-	25000	-	-	250	-	25	25	20	-	10	-	-	0.1	-	0.01	0.01	50	20	-	-	0.2
75000	-	40000	-	-	400	-	40	40	50	-	20	-	-	0.2	-	0.02	0.02	100	50	-	-	0.5
100000	-	50000	-	-	500	-	50	50	50	-	20	-	-	0.2	-	0.02	0.02	100	50	-	-	0.5
150000	-	75000	-	-	750	-	75	75	100	-	50	-	-	0.5	-	0.05	0.05	200	100	-	-	1
200000	-	100000	-	-	1000	-	100	100	100	-	50	-	-	0.5	-	0.05	0.05	200	100	-	-	1
250000	-	100000	-	-	1000	-	100	100	100	-	50	-	-	0.5	-	0.05	0.05	200	100	-	-	1
300000	-	150000	-	-	1500	-	150	150	200	-	100	-	-	1	-	0.1	0.1	500	200	-	-	2
500000	-	250000	-	-	2500	-	250	250	200	-	100	-	-	1	-	0.1	0.1	500	200	-	-	2
750000	-	400000	-	-	4000	-	400	400	500	-	200	-	-	2	-	0.2	0.2	1000	500	-	-	5

\* T = US ton  
t = metric ton

## Available Torque Capacities & Resolutions

Capacity									Resolution With Models M7I & M5I indicators									Resolution With Model M3I indicator					
lbfIn	ozFin	lbfFt	Ncm	Nm	Nmm	kgFmm	gFcm	kgFm	lbfIn	ozFin	lbfFt	Ncm	Nm	Nmm	kgFmm	gFcm	kgFm	lbfIn	ozFin	Ncm	Nm	kgFmm	kgFm
-	10	-	7	-	70	7	700	-	-	0.005	-	0.005	-	0.05	0.005	0.5	-	-	0.01	0.01	-	0.01	-
-	20	-	14	-	140	14	1400	-	-	0.01	-	0.01	-	0.1	0.01	1	-	-	0.02	0.02	-	0.02	-
-	50	-	35	-	350	35	3500	-	-	0.02	-	0.02	-	0.2	0.02	2	-	-	0.05	0.05	-	0.05	-
-	100	-	70	-	700	70	7000	-	-	0.05	-	0.05	-	0.5	0.05	5	-	-	0.1	0.1	-	0.1	-
-	1000	-	700	-	7000	700	70000	-	-	0.5	-	0.5	-	5	0.5	50	-	-	1	1	-	1	-
12	192	1	135	1.35	-	-	-	-	0.005	0.1	0.0005	0.1	0.001	-	-	-	-	0.01	0.2	0.1	-	-	-
20	320	1.5	220	2.2	-	-	-	-	0.01	0.2	0.001	0.1	0.001	-	-	-	-	0.02	0.5	0.2	-	-	-
25	400	2	290	2.9	-	-	-	-	0.02	0.2	0.002	0.2	0.002	-	-	-	-	0.02	0.5	0.2	-	-	-
50	800	4	570	5.7	-	-	-	-	0.02	0.5	0.002	0.5	0.005	-	-	-	-	0.05	1	0.5	-	-	-
100	1600	8	1150	11.5	-	-	-	-	0.05	1	0.005	0.5	0.005	-	-	-	-	0.1	2	1	-	-	-
150	-	12.5	1700	17	-	1700	-	-	0.1	-	0.01	1	0.01	-	1	-	-	0.2	-	2	-	2	-
200	-	16	2200	22	-	2200	-	-	0.1	-	0.01	1	0.01	-	1	-	-	0.2	-	2	-	2	-
250	-	20	2800	28	-	2800	-	-	0.2	-	0.02	2	0.02	-	2	-	-	0.2	-	2	-	2	-
400	-	32	4500	45	-	4500	-	-	0.2	-	0.02	2	0.02	-	2	-	-	0.5	-	5	-	5	-
500	-	40	5800	57	-	5800	-	-	0.2	-	0.02	2	0.02	-	2	-	-	0.5	-	5	-	5	-
600	-	50	6900	69	-	6900	-	-	0.5	-	0.05	5	0.05	-	5	-	-	1	-	10	-	10	-
1000	-	80	11500	115	-	11500	-	-	0.5	-	0.05	5	0.05	-	5	-	-	1	-	10	-	10	-
1500	-	125	17000	170	-	17000	-	-	1	-	0.1	10	0.1	-	10	-	-	2	-	20	-	20	-
2000	-	150	22000	220	-	22000	-	-	1	-	0.1	10	0.1	-	10	-	-	2	-	20	-	20	-
2500	-	200	29000	290	-	29000	-	-	1	-	0.1	20	0.2	-	20	-	-	2	-	20	-	20	-
5000	-	400	57000	570	-	58000	-	-	2	-	0.2	20	0.2	-	50	-	-	5	-	50	-	100	-
6000	-	500	69000	690	-	69000	-	-	5	-	0.5	50	0.5	-	50	-	-	5	-	50	-	100	-
10000	-	800	115000	1150	-	-	-	115	5	-	0.5	50	0.5	-	-	-	0.05	10	-	100	-	-	0.1
15000	-	1250	170000	1700	-	-	-	170	10	-	1	100	1	-	-	-	0.1	20	-	200	-	-	0.2
20000	-	2000	220000	2200	-	-	-	220	10	-	1	100	1	-	-	-	0.1	20	-	200	-	-	0.2
50000	-	4000	570000	5700	-	-	-	580	20	-	2	200	2	-	-	-	0.5	50	-	500	-	-	1
100000	-	8000	-	11500	-	-	-	1150	50	-	5	-	5	-	-	-	0.5	100	-	-	10	-	1
150000	-	12500	-	17000	-	-	-	1700	100	-	10	-	10	-	-	-	1	200	-	-	20	-	2
200000	-	15000	-	22000	-	-	-	2200	100	-	10	-	10	-	-	-	1	200	-	-	20	-	2
500000	-	40000	-	57000	-	-	-	5800	200	-	20	-	20	-	-	-	5	400	-	-	50	-	10

## Ordering Information

Model	Description
PTA	Adapter, customer-supplied sensor to Plug & Test® connector for Mark-10 indicators
PTAF	Adapter, customer-supplied sensor to Models F105 / F305 / F505 / F505 test frames
AC1083	Adapter, FS05 sensor / PTAF adapter to Plug & Test® connector / F755, F755S, F1505, F1505S test frames

## Compatibility

Application	Required Items
Force / torque sensor to Mark-10 indicator	PTA
Force sensor to Models F105, F305, F505, F505H test frames	PTAF
Force sensor to Models F755, F755S, F1505, F1505S test frames	PTAF + AC1083

