

TorquePRO Systems

Torque Monitoring and Control

The Promess TorquePRO Systems are the newest total systems solution from Promess for the builder and the end user. The motorized torque assembly and test systems have the ability to both monitor and control the rotational torque and angle. Advantages of the system include the ability to monitor small rotational torque with overload protection for the torque transducer. Data acquisition, signature monitoring and gauging are just a few of the standard features included in the system. The traditional approach to monitoring torque is to put a torque transducer in line with a motor or drive unit. The biggest downfall or drawback to this method is that the drive motor has the ability of producing torques greater than what the torque transducer is rated for. The torque transducer is selected based on the torque and resolution needed.

The Promess system consists of two main components: the **Torque Module** and the **Promess Motion Controller**. The Torque Module consists of a servomotor, encoder, torque transducer and an output shaft for direct coupling to the tooling. Torque can be measured in both the clockwise and counter clockwise direction. An angular encoder provides the angle feedback and the mechanical overload protection prevents the torque transducer from being overloaded. It can be mounted in either a base plate or flange configuration. The Promess Motion Controller and monitoring system is an all in one package. Additional inputs available for feedback from other analog or digital sensors. It has dedicated and user definable outputs for handshaking purposes.



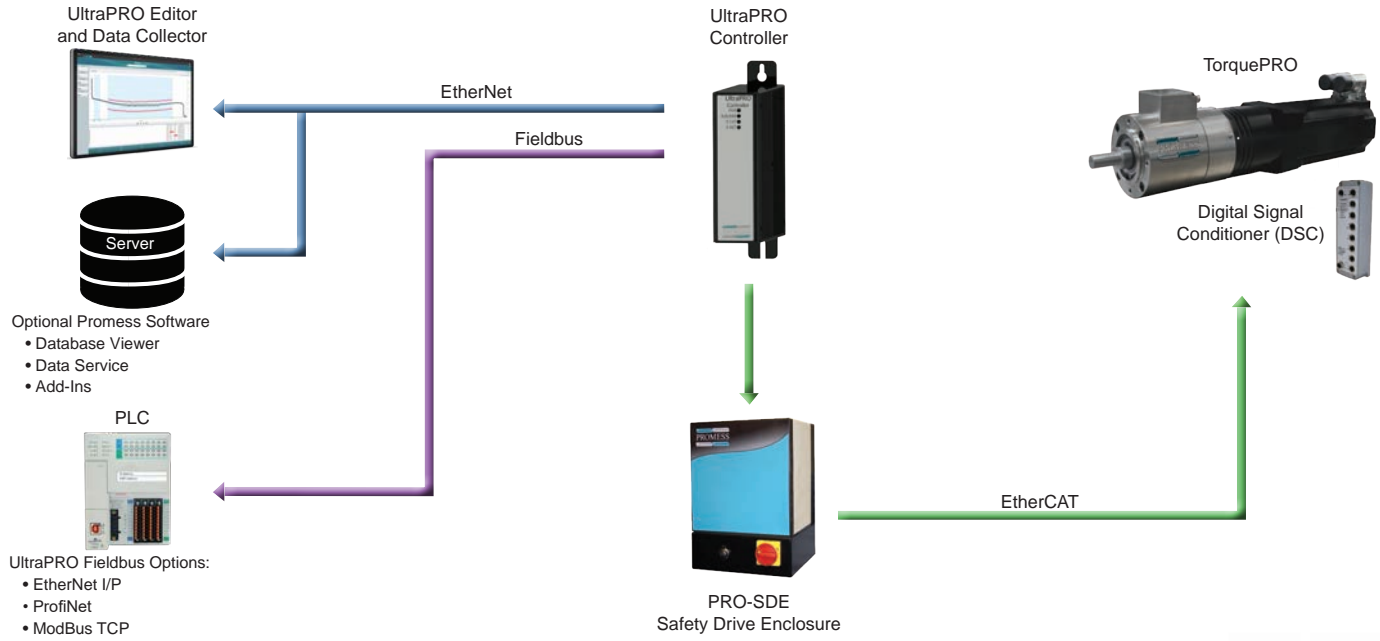
Promess Provides:

- Torque Module / Spindle
Includes:
 - Integrated Torque Transducer
 - Preamplifier
 - Servomotor and Amplifier
- Promess Multi-Axis Controller with Windows-based software
- Cables

Applications:

- Steering component test and assembly
- Drive train component test and assembly
- Manual window crank final test
- Seat testing
- Torque to turn testing
- Virtually unlimited

System Diagram / Components



TorquePRO Capacity

TorquePRO Capacity

Torque Capacity		Speed
Nm	lb-inches	RPM
5	44	250
20	177	250
50	442	250
100	885	250
200	1,770	250
500	4,425	150
1,000	8,851	75
2,500	22,127	20
5,000	44,254	10
10,000	88,507	4

*Other sizes and options available. Speed is based on 480 VAC supply

Features:

- Move to an angle / position
- Move to a torque
- Move to external signal
- Move to rate of change
- Move to multiple positions & torques within same program
- Multiple part programs

