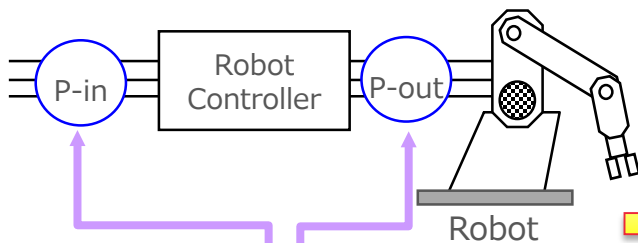


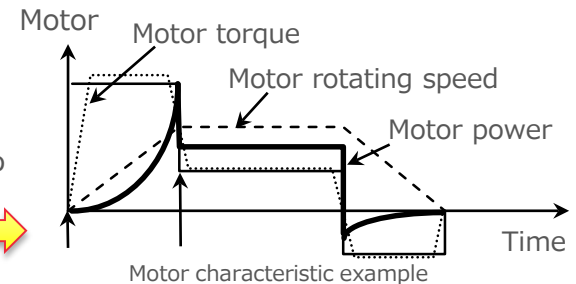
PX8000 Evaluation Test of Motor for Industrial Robot

Power Measurement of Transient Phenomenon

There are a large number of servo motors inside a single industrial robot; therefore, it is important to optimally adjust the servo movement and reduce the total power consumption in order to make robots operate for a longer period of time by battery power. The PX8000 Precision Power Scope can observe the transient changes of power distribution to controller and motor output power during motor control. Also, it measures instant voltage value, current value, and power data during repetitive acceleration and deceleration motion. On top of this, the PX8000 can measure total efficiency by measuring mechanical output towards motor power distribution, which is from torque and rotating speed measurement. Since the accelerating and decelerating time of industrial robot motors ranges from a few hundred ms to a few sec. in general, using the PX8000, which can measure transient power changes like no other, allows detailed analysis and efficiency improvement.



One servo movement takes a few hundred ms to a few sec., done multiple times. By measuring not only the motion power consumption on each motor but also the entire process from beginning to end, it can support energy conservation.



PX8000 Precision Power Scope

Features

- High accuracy & high speed sampling
Accuracy: $\pm 0.1\%$ of reading
 $+0.1\%$ of range
Sample rate: Max. 100MS/s (12bit)
- High bandwidth: DC to 20MHz
(Sensor voltage input)
DC to 10MHz (Direct input)
- Number of modules installed: 1 to 4 power modules
*AUX module for torque, rotating speed measurement can be installed.

