

## HYPERLOGIC™ SYSTEM

Advanced air-fuel ratio control for two- and four-cycle engines

HyperLogic is a self optimizing control system that uses trapped equivalence ratio as the basis for the air/fuel ratio control. These control algorithms were developed for two- and four-stroke, turbocharged, spark-ignited engines.

HyperLogic can be used for total unit control, including auxiliaries, or it can be used in modules to retrofit or upgrade existing systems. Each system is exclusively designed to meet each client's specifications.

**Core control platform:** Panel, PLC and HyperLogic application software.

**Adaptive air/fuel ratio control:** Trapped equivalence ratio, calculated in real time, controls the engine at optimum efficiency based on either emissions or fuel savings.

**Automation:** Local and remote startup/shutdown capability.

**Auxiliary equipment control:** Auxiliary systems setpoints, control and HOA screens.

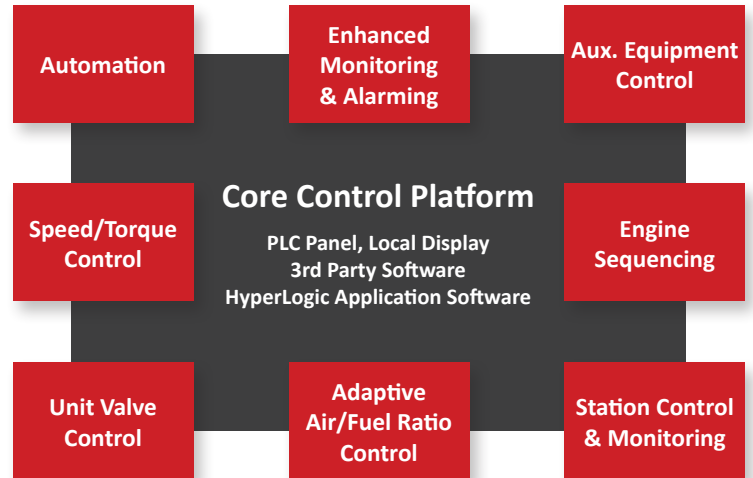
**Engine sequencing:** Automatic and manual engine sequencing with status screens.

**Enhanced monitoring:** Graphic monitoring screens including sequences and control screens.

**Station control and monitoring:** Passing information to and from the station controllers, robust communications is a must.

**Unit valve control:** Valve positioning and sequencing from the HMI.

**Speed and torque control:** Sophisticated loading sequence automatically control compressor pockets and engine speed.



*The HyperLogic suite of modules can be picked from as needed. Cooper offers engineering design and programming, parts procurement, panels and equipment and the construction team to implement the system.*

### Benefits

- Superior screen design arrangement allows for easy navigation and maximizes configurability by allowing parameters (alarm limits, shutdown alarms, I/O scaling, control setpoints) to be changed without the use of a laptop.
- Minimizes downtime with error messaging system quickly identifying engine malfunctions and isolating the problem.
- Maximum HMI functionality by incorporating all controlling devices, such as HyperFuel, ignition, and PLC.
- Maximizes effective analysis through continuous monitoring of engine parameters displayed in trends, tabular and/or bar graph views.
- Uses as much existing control hardware as possible, and where new control components are required, uses off-the-shelf hardware.

**LEGENDS DON'T STOP. WE MAKE SURE OF IT.™**

CALL +1-844-RECIP-43 (INTERNATIONAL: +1-713-354-1299)  
24/7 TECH SUPPORT: SUPPORT@COOPERSERVICES.COM  
COOPERSERVICES.COM