D1000M Series Command Set Protocol

The DGH D1000M series products use a simple command and response ASCII protocol or the Modbus RTU protocol. A module must be interrogated by a host computer to obtain data. A module will never initiate a command sequence in order to prevent communications collisions.

A command is initiated with a command prompt, may be a dollar sign ($) or pound sign (#). Following the prompt a single address character must be transmitted. Each module on a communications bus must be setup with a unique address. The address is followed by a two character command. Every command is terminated with a carriage return.

The module response begins with a response prompt, which is an asterisk (*) followed by the necessary data. Every response is terminated with a carriage return. Linefeeds after the carriage return are user selectable. See the table below for typical commands and their respective response messages.

Command Definition	Typical Command	Typical Response
DI - Read Digital Inputs	$1DI	*0003
DO - Set Digital Outputs	$1DOFF	*
RD - Read Data	$1RD	*+00072.00
RS - Read Setup	$1RS	*31020142
RZ - Read Zero Register	$1RZ	*+00000.00
WE - Write Enable	$1WE	*
Write Protected Commands		
CZ - Clear Zero Register	$1CZ	*
MBD - Modbus Disable	$1MBD	*
MBR - Enable Modbus	$1MBR01	*
RR - Remote Reset	$1RR	*
SU - Setup Message	$1SU31070142	*
TS - Trim Span	$1TS+00745.00	*
TZ - Trim Zero	$1TZ+00000.00	*