DATA Outputs

Data I/O Connector

The indicator has an 8 pin data I/O connector with several supported communication protocols. These communication protocols can be accessed using a dedicated cable or through custom wiring using the Pigtail cable.

Serial ASCII Command Protocol (USB/RS232/UART)

The gage supports several "serial" interfaces that interact with the device using a human readable ASCII command protocol. This protocol can be accessed over USB as a virtual com (CDC) device, RS232 or TTL level UART. For all hardware implementations, the specifications and command set are identical.

Commands

All Commands are terminated with a new line character <CR>. All commands and the most common settings are listed below. Please see technical manual for more details.

Examples: Enter p013=2 followed by a <CR> to change the display units to MM.

COMMAND	DESCRIPTION
R	Print current gage reading
C	Clear gage
H	Toggle Hold Mode
rstERR	Resets errors
?pXXX	Get the value of configuration parameter "XXX"
pXXX=<new value>	Set the value of parameter "XXX" to <new value>

RESPONSES	DESCRIPTION
+ 2.1380, MM	13 character response to print reading
SUCCESS	Parameter is successfully written to
NOT FOUND	Parameter Name could not be found
NO ACCESS	User does not have write access
OUT OF BOUNDS	New value is not within the allowable range
NON NUMERIC	New value is not a number

Hardware Specifications

Baud	9600
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

PARAMETER	DESCRIPTION	OPTIONS
P007	Gage Resolution	1 = .001", .02mm, 2 = .0005", .01mm, 3 = .0001", .002mm, 4 = .00005", .001mm
P011	Measurement Mode	0=ABS, 1=TIR, 2=INCR
P013	Units	1=Inches, 2=Millimeters
P019	Travel Reverse	0=Normal, 1=Reverse
P021	Hold On	0=Off, 1=On
P022	Hold Mode	0=Frz, 1=Min, 2=Max
P040	Ratio On	0=Off, 1=On
P063	Suppress Output	0=None, 1=Disable error and status responses

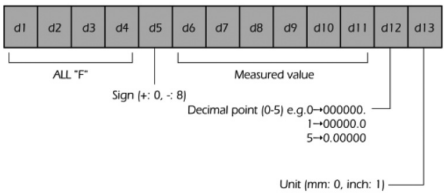
DATA Outputs

Digimatic (MTI) Protocol

The gage supports the Digimatic (MTI) protocol, also commonly referred to as SPC. Digimatic is a 3 wire (REQ, DATA, CLK) communication protocol that operates at TTL levels and sends gage measurements in a 13 digit (52 bit) packet format. The output is compatible with most data collection devices supporting the Digimatic protocol including the Electronic Measuring System.

Packet Timing

Maximum Request Rate	10 Hz
Data Clock Frequency	1,250 Hz



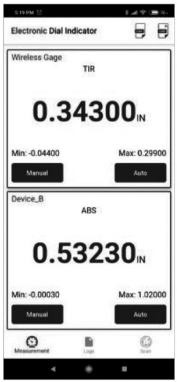
Wireless Communication

The CORE & VRS indicators have two wireless communication options available.

Shortrange Smartphone Interface

The gage supports communication using a shortrange wireless radio compatible with most major smartphones. Using the free Android and iOS apps, a user can perform the following actions:

- Connect to 7 devices
- View measurements in analog and digital formats
- Record measurements and share via email
- Change settings



The smartphone interface can also be provided for use in custom application. Users should contact support for more details.

MicroRidge

The gage may include a longer range RM2.4 MicroRidge radio module. This allows the gage to be integrated into the complete MicroRidge ecosystem. The radio supports transmission of measurements at up to 5 Hz and can be received using one of the MicroRidge base receivers (USB, RS232, Wedge)

Contact MicroRidge or visit microridge.com for further details on their wireless system

MICRORIDGE
Measurement Collection Specialists
Connect Any Gage into Any Software