A L B I O N D E V I C E S , I N C .

Precision Gages and Temperature Compensation

June 2016

TComp II with Wi-Fi (TComp IIw)

Wi-FI Now Available

Albion Devices, Inc., has developed a Wi-Fi link that will connect TComp II gages wirelessly to a PC. This feature is available in new gages or it can be retrofitted to existing TComp II equipped gages (controller front panel is red – older TComps have a grey face plate). The package includes new Wi-Fi circuitry fitted internally to the TComp II controller and a receiver that connects to a PC via USB cable. Wi-Fi equipped units will be known by the model name TComp IIw.

Now your gaging data can be easily transmitted wirelessly to your SPC system or quality control documentation.

Wi-Fi receiver

Examples of TComp II controllers that can be converted to TComp IIw wireless equipped units:

Wi-Fi transmission modes

- In Terminal mode and use menu options to determine what is transmitted and when, or
- In Wedge mode, in which "Send" button transmits currently displayed dimension and carriage return as a keyboard entry that is entered automatically in a user selected field on a PC.

A L B I O N
Albion Devices, Inc.
531 Stevens Ave., West
Solana Beach, CA 92075
Tel: 858-792-9585
Fax: 858-792-9644
www.AlbionDevices.com

Interface Protocol

Commands

There are two ways to initiate transmission of data from the Wi-Fi equipped TComp IIw:

1) The SEND button will transmit the displayed measurement once, in either Wedge mode or Terminal mode, depending on selection on receiver.
2) TComp IIw uses simple ASCII characters to communicate remotely in Terminal mode. Format is as follows:

   The host, if requesting data, must send simple commands to Tcomp IIw to initiate an action.

   Example 1: Mastering (setting to ZERO) TComp IIw is done by sending the ASCII characters: "$1", then a carriage return (CR). Example 2: The temperature corrected size measurement is obtained by sending the letter "M", then a carriage return. (case sensitive; use capital M)

   Format of data to be transmitted from the TComp IIw.

   a) 9600,8, N, 1 = 9600 baud (default setting)
      8 data bits
      No parity
      1 stop bit

   b) All responses are terminated in a <CR>, <LF>.

   c) All commands must terminate in a <CR>.

   d) Multiple commands are OK, but require a comma between, as in : M,T <CR>

INCOMMING COMMAND STRING TO TCOMP	ACTION	OUTGOING RESPONSE FROM TCOMP
$1<CR>	Masters Tcomp IIw. Forces display to ZERO	CAL
M<CR>	Ask for currently displayed reading	Send reading, <CR>< LF> Format = (see below)
T<CR>	Asks for temperatures of master, gage and workpiece	TM=+20.3C, TG=+30.2C, TW=+34.5C
MT<CR>	Asks for compensated dimension, uncompensated dimension, workpiece temperature, master temperature and gage temperature	Sends all requested values separated by commas.
ALL<CR>	Asks for complete dump of all setting for currently used feature whether saved or not.	Send all user set variables separated by commas. Identify by saved "name" or use "none" if not named.

Example: Command: M<cr>
Response: .0034 in , or -.0034 in if negative, English mode. mm if Metric.