













## FM Torque Process Monitor - TCV $\mathrm{e}^2$



- Two independent channels so that two users can work independently of each other.
- Works with both the brand new TAC digital torque/angle click spanner (coming soon) and the legendary SLTC-24FM wireless clicker torque wrenches.
- Controlled via I/O. network or barcode.
- Works with 2 barcode readers.
- Supplied with a full version of ACOP, PFCS. 1)
- Ethernet IP capable. 2)
- Pairing of up to 10 wireless tools.
- Equipped with 2 separate 24 V DC I/O ports.
- Complete interface to SR Global Manager software for setting parameters etc.
- Logging in Global Host (#10622) or ToolsNet.



## Two Controllers in one!

The TCV e2 is the latest torque controller from Sturtevant Richmont. Back in 1999 the TCV was one of the first torque controllers to hit the market. Paired with an SLTC FM-2.4 GHz preset click wrench, the TCV quickly found a spot in automotive plants around the world. In 2017 we updated the TCV to pair with two click wrenches for backup operation.

Now the wireless error-proofing world is rocked again. The TCV e2 can be either network or I/O-driven. It is perfect for indexing lines. The TCV e2 can be used with the legendary SLTC FM 2.4 GHz preset click wrench and/or the all-new TAC digital torque and angle click wrench.

The TVC e2 manages up to 10 parameters and can be paired with up to a total of 10 tools. Tools are paired with parameters. Operators work independently. Like the Global 400, the TCV e2 has complete date/ time stamped reporting. The display on the TCV e2 and the LED on the wrench provide an OK/NOK visual guidance for the operator.

When used with the TAC digital torque and angle click wrench, the reporting for each fastener shows both the point at which the wrench clicked, the point at which the operator stopped pulling (aka Peak Torque), and the degrees of fastener rotation past snug torque.

Need to use a barcode scanner to bring up parameters? The TCV e2 has two USB ports that are compatible with serial scanners.

The TCV e2 and TAC combination is the new power-duo of error-free assembly. TCV e2 has a memory capacity of 40,000 torque events and stores up to 2 MB of network event data.

The TCV e2 broadcasts on twelve channels within 2.4 GHz. We recommend the tool to controller distance be no more than about 10 to 15 meters. Environmental factors may impact signal strength and clarity. Welders, autonomous vehicles, large brick walls, steel beams all may impact the radio strength.



TCV e <sup>2</sup>							
Model	Item No.	Number of contr. torque wrenches	Radio FM	E/A ports DC 24V	PC ports USB	PC ports NET	Dimensions mm
TCV-e2	R10676	1-10	2.4 GHz XBee Pro	13 pin (4 in, 6 out)	2.0 (A)	RJ-45	ca. 233×222×83

<sup>1)</sup> ACOP = Atlas Copco Open Protocol, PFCS = Plant Floor Control System. 2) IP = Internet Protocol.



The 2.4 GHz FM modules in Sturtevant Richmont's products are XBee Pro radio modules that operate on the IEEE 802.15.4 wireless standard. These devices do not comply with the ZigBee protocol.



