



# Datasheet TeleController TC415



## Introduction

The TC415 is the most powerful TeleController of a series of Remote Terminal Units (RTU) that Inter Act has developed for telemetry over internet. Out of the four different TeleControllers available, the TC415 provides the best connectivity, mass storage capacity, and highest processor power. The TC415 is thus best suited for larger and more complex processes.

It can be used stand alone, or it can be connected to a private and secured domain in TeleControlNet. TeleCotrolNet is a Software as a Service (SaaS) for WEBscada and WEBmes applications.



## Main functions

The TC415 enables controlling and monitoring of remote processes and machines. This TeleController is the gateway between the local process controller (e.g. PLC) and the internet or TeleControlNet. The TC415 can communicate real time with virtually any existing process controller. This connection does not require any change of the existing software on the local process controller. The connection with TeleControlNet can be realized via a mobile 3G/4G APN Network or DSI.

The TC415 performs three major tasks:

- It locally stores process data.
- It receives remote user controls to be submitted to the local process controller.
- It sends process alarms in real time to TeleControlNet.

## Main features

- $\bullet$  Single board PC for 35 mm DIN rail mounting, including internal 3G/4G modem.
- Applicable in PLC control systems as HMI (WEBscada) terminal.
- Can also be supplied without WEBscada software.

#### Processor

Intel's Braswell family of 14 nm SoCs provides a powerful, energy-efficient platform for the most demanding of IoT and embedded applications.

#### 3.5 inch Miniboard with Intel® Braswell Series Processor

The board integrates the Intel® Braswell with the Intel® Express chipset, Integrated Intel® Braswell SoC integrated HD Graphics Technology with integrated memory. It provides I/O capabilities and flexibility via high-bandwidth interfaces such as CF, ethernet, Mini PCI, Mini PCIe, Serial ATA and USB 2.0.

# Specifications

#### **CPU**

• Intel® Braswell Series Processor N3710/X5-E8000

## Chipset

Braswell SoC

## **System memory**

• 1xDDR3L DIMM 1600 MHz 4G

## **Graphics**

Integrated Intel® HD Graphics

## Supported frequency bands

- Dual Band 2G (GSM) 900/1800 MHz
- Tri Band 3G (UMTS, W-CDMA) 900/1800/2100 MHz, FDD-Band (8,3,1)
- Quad Band 4G (LTE) 800/900/1800/2600 MHz, FDD-Band (20,8,3,7)

### Max connectivity speeds

• LTE Cat. 3

DL: max. 100 Mbps, UL: max. 50 Mbps, 2x2 DL MIMO

 HSPA+ DL Cat.24 / UL Cat. 6, Dual Carrier DL: max. 42 Mbps, UL: max. 5.76 Mbps

• EDGE Class 12 data rates

DL: max. 237 kbps, UL: max. 237 kbps

• GPRS Class 12 data rates

DL: max. 85.6 kbps, UL: max. 85.6 kbps

#### External I/O

- 2 x 3G/4G antenna (1 Main, 1 Div)
- 2 x Intel® I210-AT Gigabit ethernet
- 1 x GPS antenna
- 2 x RS232
- 4 x USB 2.0
- 1 x HDMI
- 1 x DP
- ACPI 2.0 compliant power management, supports power saving mode
- Chipset integrated Real Time Clock (RTC) with onboard lithium battery
- System reset programmable watchdog timer (timeout: 1 to 255 s or min.)

#### **Dimensions**

- Height: 167 mm (6.6")
- Width: 56 mm (2.2")
- Depth: 135 mm (5.3")

# Weight

• Approximately 726 g

## **Supply voltage**

• 7 to 30 VDC

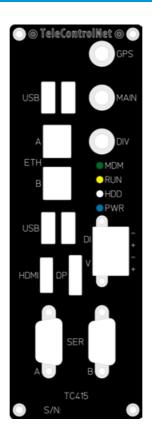
## **Supply current**

• 0.5 A @24 V - nominal

## **Temperature**

- Operating: 0 to 60 °C
- Storage: -20 to 80 °C

# Main features



<b>&gt;</b>	Notes	

#### Inter Act industrial automation B.V.

Dijkgraafweg 16, 7336 AT Apeldoorn - P.O. Box 1011, 7301 BG Apeldoorn - The Netherlands Tel.: +31 (0)55 534 2002 - Fax: +31 (0)55 534 2010 - www.interact.nl - info@interact.nl

#### Copyright ©2018 Inter Act industrial automation B.V. All Rights Reserved.

The information in this document is subject to change without prior notice in order to improve reliability, design and function and does not represent a commitment on the part of the manufacturer.

In no event will the manufacturer be liable for direct, indirect, special, incidental or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic or other means in any form without prior written permission of the manufacturer.