

## Technical Data

# Datapaq® DP5 Radio Telemetry System

Real-time temperature data direct from your thermal process

**The Datapaq® DP5 radio telemetry system utilizes radio-frequency technology to allow data transmission from the data logger in real time. As the system travels through the process, product and process temperature data can be viewed, analyzed and reported instantaneously. This technology can be applied to monitoring key thermal processes in most industrial heating applications.**

## System Features

- System can be tailored to meet your process requirements
  - Batch Process(es): Simple primary receiver kit
  - Conveyorized Processes: Primary receiver complemented with add-on secondary receivers
- Automatic frequency selection, minimizing interference and maximizing signal quality
- Intelligent listen-before-transmit technology enables the system to operate with multiple loggers
- Receivers connected with error free industrial RS485 communications bus, maximizing data reception
- Real time system diagnostics reporting signal status for each transmitting logger and receiver
- Transmission performance optimized for high-temperature operation with internal self-calibration
- In-logger data storage backs up transmitted data ensuring integrity of data



Primary receiver kit connected to a PC

## Features and Benefits

**Rapid QA** – Know that your product has been thermally processed to specification before the system has even exited the process.

**Improve the productivity of any batch process** – Know when critical product temperature has been achieved and allow the process to be completed or moved on to the next phase. Optimize cycle times with confidence.

**Rapid fault-finding** – See immediately when process problems are being experienced without having to wait until the completion of the process. Allow corrective action earlier, saving time and reducing possible scrap.

**Improve efficiency of process optimization** – Use live data to view the effect of any process-parameter changes on the temperature profile instantly.



Secondary receiver kit

## Technical Specifications

### TM21 Transmitter (TX1401)

Transmitter fitted inside data logger

<b>Datapaq DP5 logger range</b>	6 and 12 Channel, Type K, 85 °C Operation
<b>Frequency ranges*</b>	Euro 434.065-434.740 MHz USA 463.525-463.975 MHz
<b>Operating temperature range</b>	0 °C to 85 °C
<b>Transmission range</b>	200 m (656 ft) "in open field conditions"
<b>Max number of transmitters per system</b>	6
<b>Sampling interval range</b>	1 sec to 10 min
<b>Interleaving limits</b>	10
<b>Approvals*</b>	EU-CEPT/ERC/70-03E USA-FCC CFR 47 Part 90

\* Contact us for frequency ranges for other approved countries

### TM21 Primary Receiver (Euro RX4200, USA RX4100)

Primary Receiver with integral USB comms to PC. Powered by CH0070. Equipped with Type N RF connector.

<b>Dimensions (H x W x L)</b>	44 x 139 x 98 mm
<b>Frequency</b>	To match transmitter
<b>Antenna</b>	Desk Top 15 cm
<b>Operating temperature</b>	0 °C to 50 °C
<b>Status display</b>	2 line 16 character backlit LCD

### TM21 Secondary Receiver (Euro RX4201, USA RX4101)

Secondary receiver connected in series to the TM21 primary receiver with RS485 communication cable (10 to 100 m / 32 to 328 ft).

<b>Dimensions (H x W x L)</b>	44 x 139 x 98 mm
<b>Frequency</b>	To match transmitter
<b>Antenna</b>	Unity gain end feed with type N connector
<b>Operating temperature</b>	0 °C to 50 °C
<b>Status display</b>	single power and status LED
<b>Maximum quantity</b>	Max 6 secondary connected to 1 primary receiver

## Insight Software

- Automatic frequency selection and set-up
- Real time tool detailing quality of data transmission for each logger / receiver and system status information
- Real-time analysis of process data and review against process set-up (zones, temperature set-points, overlays)
- Event markers log events at the precise point they happen on the profile
- Automatic data-saving to PC to guarantee data

## The Fluke Process Instruments Guarantee

Each Fluke Process Instruments system is supported with a full one year warranty.

Service contracts available: Complementing the warranty, we offer a yearly service and recalibration contract, which includes free software updates and loan equipment for guaranteed peace of mind.

## Fluke Process Instruments

ITA AQUATEKNICA, S.A.  
C/Jordi de Sant Jordi, 8 acc  
46022 - Valencia - España  
aquateknica@aquateknica.com  
[www.aquateknica.com](http://www.aquateknica.com)

**EMEA**  
Cambridge, UK  
Tel: +44 1223 652 400  
[sales@flukeprocessinstruments.co.uk](mailto:sales@flukeprocessinstruments.co.uk)

**Asia East and South**  
India Tel: +91 22 2920 7691  
Singapore Tel: +65 6799 5596  
[sales.asia@flukeprocessinstruments.com](mailto:sales.asia@flukeprocessinstruments.com)

**Worldwide Service**  
Fluke Process Instruments offers services, including repair and calibration. For more information, contact your local office.

[www.flukeprocessinstruments.com](http://www.flukeprocessinstruments.com)

© 2018 Fluke Process Instruments  
Specifications subject to change without notice.  
6/2018 DP5 Telemetry\_DS\_Rev A\_EN