DATAPAQ®
A Fluke Company

Kiln Tracker®

The Industry's Most Durable Profiling Equipment

The Worldwide Leader in Temperature Profiling

DATAPAQ® Kiln Tracker® System

Kiln Tracker system with TM21 radio telemetry system

TRUSTED MARKET LEADER FOR OVER 30 YEARS

The DATAPAQ Kiln Tracker continues to set the industry standard for ease-of-use, reliability and ruggedness. Over the last 30 years, DATAPAQ has been helping manufacturers with solutions for the ceramics industry to identify kiln issues, optimize processes and set up new operations. Combine a DATAPAQ logger with one of our rugged, stainless steel, phased-evaporative thermal barriers, dedicated software packages and thermocouple variants, and you have a complete system that will withstand the harshest environments.

The smarter, stronger solution ... saving you time and money

10 and 20 channel case style options to suit barrier design

BP3021 High temperature battery pack

DATA LOGGER DATAPAQ TP3

Made from a single piece of machined stainless steel with Bluetooth® communication options and multiple thermocouple types over 10 or 20 channels makes the DATAPAQ TP3 the toughest and smartest data logger available.

- Ten or twenty thermocouple channels for maximum data collection on each run
- Multiple RF logger support for simultaneous multiple kiln car monitoring
- Multiple thermocouple types for maximum flexibility in ceramics firing
- Reset/download via Bluetooth with short range telemetry capability
- Unique 20 channel logger design for ease-of-use and time saving setup
- High accuracy: ±0.3°C (±0.5°F) for compliance to tight specifications
- On-board memory service log for remote diagnostic and rapid on-site service
- Radio frequency (RF) telemetry for data acquisition in real time
- 3.6 million data points memory and enhanced battery life for more data collection even in the longest process

RADIO TELEMETRY TM21

Immediate Feedback for Setup and Problem Solving

Real time monitoring affords instant information for vital problem-solving and lets you assess the effects of changing kiln settings, as the process progresses.

- Make changes in real time to avoid issues in the following cars
- Low frequency/high power transmitting signals receive maximum data even through the thickest kiln walls
- Plug and play setup, extendable receivers and cabling for long kilns of 150 meters/493 feet or more
- All data feeds back to control room or pc room

TM21 Radio telemetry system

Ultimate Protection and Versatility

THERMAL BARRIERS

DATAPAQ offers the widest range of thermal barriers for a variety of kilns and applications. Specifically engineered barriers are available for floor, roof, and wall tiles, heavy clay, sanitary ware and tableware. Barriers are small enough to fit beneath the kiln car, and have sufficient thermal capacity to withstand high heat for the duration of the process.

Thermal barriers

TUNNEL KILN SOLUTIONS

Designed to fit under kiln cars, the TB6000 series is the ultimate choice for tunnel kilns up to 1600 °C (2912 °F).

- Innovative new design for ease of use and rapid setup to reduce setup/removal times
- 10 or 20 measurement channels for maximum data and clearer process characteristics
- Radio telemetry as optional for real time monitoring allows flexibility to adjust kiln settings in real time
- Compact design to fit under kiln car available in various capacities to suit short or longer duration processes

Kiln Tracker system in roller hearth sanitaryware kiln

ROLLER HEARTH KILN SOLUTIONS

Proven technology from DATAPAQ uses a uniquely designed water tank surrounded by a blanket of ceramic fiber insulation. Many different solutions are available as standard and made-to-order systems can be supplied.

- 10 or 20 measurement channels for monitoring ambient and ware body, detects temperature variations across the kiln
- Low height design to fit all roller hearth kilns for minimal disturbance during the process
- Easy setup and removal – reduce setup time and manpower
- Real time radio telemetry as optional – make changes in real time during production

HYDRO KILN SOLUTIONS

- Designed for tunnel hydro kilns – fully water tight
- Real time radio telemetry as optional allows changes on the fly
- Robust 310 stainless steel resists corrosion and provides long service life

Thermal barrier with ‘in kiln’ antenna

Easy … Intuitive … Powerful

Kiln Tracker analysis software

INSIGHT™ SOFTWARE FOR KILN TRACKER

Designed for all user levels, the software starts in wizard mode and guides the user through the basic setup of a kiln profile. Alarms automatically alert the user when a process comes too close to acceptable tolerances Advanced analysis for product development and fault finding.

- Quartz inversion index – measure the “noisiness” of a profile in the QI zones; determination whether heating/cooling rates or transient rate changes are most affecting product quality
- Tolerance/reference curve overlay, advanced data export/import, enhanced process files, advanced thermograph view and customized reporting
- Calibration reminder to let you know when your logger is due for calibration, for ISO9000 traceability
- Set up your own “alarm” system to alert you when a process is out of specification
- Change software language on the fly within Insight software
- Logger diagnostics tools send information direct from a remote data logger to a DATAPAQ service team for quicker response on field issues

TECHNICAL SPECIFICATIONS

DATA LOGGER

Model number	TP3116	TP3136	TP3115	TP3135
Number of channels	10	20	10	20
Temperature range	–100 °C to +1.370 °C (–148 to 2.498 °F)		–100 to +1.370 °C (–148 to 2.498 °F)	
Connectivity	USB or Bluetooth		USB or Bluetooth	
Max. operating temperature	110 °C (230 °F)		110 °C (230 °F)	
Memory capacity	3.2 million data points	3.6 million data points	3.2 million data points	3.6 million data points
Sampling interval	0.3 s to 50 min no telemetry, 1 s to 50 min RF telemetry		0.3 s to 50 min no telemetry, 1 s to 50 min RF telemetry	
Logger accuracy	± 0.3 °C (± 0.5 °F)		± 0.3 °C (± 0.5 °F)	
Battery type	VHT Lithium × 4		VHT Lithium × 4	
Battery pack	BP3100		BP3100	
Battery life at 100°C (212°F)	1 min sample interval = 500 h	1 min sample interval = 450 h	1 min sample interval = 500 h	1 min sample interval = 450 h
Thermocouple type	K (N,S,R and B types available)		S (N,K,R and B types available)	
Multiple thermocouple types	Up to 3 types on the same logger		Up to 3 types on the same logger	

THERMAL BARRIER

Part number	Height	Width	Length	Weight		Time at Temperature		
				Empty	Filled	@150 °C (300 °F)	@200 °C (400 °F)	@400 °C (750 °F)
TB6100	180 mm (7.1 in)	350 mm (13.8 in)	480 mm (18.9 in)	20 kg (44 lb)	27kg (60 lb)	250 hrs	115 hrs	35 hrs
TB6200	154 mm (6.1 in)	279 mm (11 in)	429 mm (16.9 in)	14 kg (30 lb)	18kg (41 lb)	150 hrs	78 hrs	25 hrs
TB6400	120 mm (4.7 in)	200 mm (7.9 in)	370 mm (14.6 in)	7 kg (16 lb)	9kg (21 lb)	98 hrs	48 hrs	12 hrs

Over 30 standard thermal barriers available. DATAPAQ has produced over 200 different styles of barriers. Special barriers can be ordered.

THERMAL BARRIERS FOR ROLLER HEARTH KILNS

Part number	Height	Width	Length	Weight (full)	Thermal duration @ average 700 °C (1290 °F)	Maximum operating temp	Industry
TB3031	150 mm (5.9 in)	382 mm (15 in)	610 mm (24 in)	28 kg (61 lb)	5 hrs	1200 °C (2192 °F)	Roof tiles
TB3036	200 mm (7.8 in)	432 mm (17 in)	660 mm (25.9 in)	32 kg (70.5 lb)	7 hrs	1200 °C (2192 °F)	Tableware
TB3038	300 mm (11.8 in)	512 mm (20.1 in)	735 mm (28.9 in)	51 kg (112.4 lb)	16 hrs	1200 °C (2192 °F)	Sanitaryware

DATAPAQ makes over 100 thermal barriers. Contact us with your process details to select the barrier specific to your application.

THE DATAPAQ GUARANTEE

Each DATAPAQ system is supported with a full one year warranty. Complementing the warranty, we offer a yearly service and recalibration contract, which includes free software updates and loan equipment for guaranteed peace of mind (dependent on country).

Headquarters

DATAPAQ Limited
Lothbury House, Cambridge Technopark
Newmarket Road
Cambridge CB5 8PB, UK

Tel: +44 1223 652 400
Fax: +44 1223 652 401
E-mail: sales@datapaq.co.uk

Sales Offices

North and South America
DATAPAQ Inc.
3 Corporate Dr. Unit 1
Derry, NH 03038, USA

Tel: +1 603 537 2680
Fax: +1 603 537 2685
E-mail: sales@datapaq.com

Asia
Tel: +65 6799 5596
Fax: +65 6799 5577
E-mail: sales.asia@datapaq.com

China
Tel: +86 10 6438 4691
Fax: +86 10 6512 3437
E-mail: sales@datapaq.com.cn

India
Tel: +91 22 4227 0304
Fax: +91 99 2005 2908

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