

Kyros Components

Technical Specifications

DTK02 - Temperature Transmitter with Sensor (DPT1)

Temperature Range - External	-30°C to 93°C/-22°F to 200°F
Enclosure Size	8.9cm x 4.3cm x 2.2cm
Enclosure Weight	Approx. 85grams
Enclosure Colour	Transparent blue
Installation	Snaps to Base Plate. Base Plate mounts with screws or double-stick tape
Operation Battery Type	"2/3 A" size LiMnO2 (e.g., Duracell DL123A)
Battery Life	Up to 5 years in ambient conditions
Operating Environment	-10°C to $60^\circ\text{C}/14^\circ\text{F}$ to 140°F, up to 95% relative humidity (non-condensing)
Open Field Range	250 metres
RF Specifications	868,902-928 MHz, Spread Spectrum

* Alternative High (DTP2), low (DTP3) or DTP4 series temperature sensors available

DTK04 - Transmitter with Contact Sensor

Contact Sensor	Designed to monitor contact between two devices e.g. $\operatorname{open}/\operatorname{close}$ status
Temperature Range - External	-30°C to 93°C/-22°F to 200°F
Enclosure Size	8.9 x 4.3 x 2.2cm
Enclosure Weight	Approx. 85grams
Enclosure Colour	Transparent blue
Installation	Snaps to Base Plate. Base Plate mounts with screws or double-stick tape
Operation Battery Type	"2/3 A" size LiMnO2 (e.g., Duracell DL123A)
Battery Life	Up to 5 years in ambient conditions
Operating Environment	-10°C to $60^\circ\text{C}/14^\circ\text{F}$ to 140°F , up to 95% relative humidity (non-condensing)
Open Field Range	250 metres
RF Specifications	868,902-928 MHz, Spread Spectrum

DTK05 – Transmitter with Temperature & Humidity Sensor

Accuracy and Temp Range	-28°C to 93°C/-18°F to 200°F Accuracy ±0.5°C/1°F RH Range: 0% to 99% RH Accuracy ±2% between 10% & 90% RH
Enclosure Size	8.9cm x 4.3cm x 2.2cm
Enclosure Weight Approx	85grams
Enclosure Colour	Transparent blue
Installation	Snaps to base plate. Base plate mounts with screws or self adhesive tape
Operation Battery Type	2/3 A size LiMnO2 (e.g. Duracell DL123A)
Battery Life	Up to 5 years in ambient conditions
Operating Environment	-10°C to $60^\circ\text{C}/14^\circ\text{F}$ to 140°F up to 95% relative humidity (non-condensing)
Open Field Range	250 metres
RF Specification	868, 902-928 MHz, Spread Spectrum

DTK06 - Dual Analogue Input Transmitter

Measurement Features	Jumper selectable - 0-5V, 0-10V or 4-20mA Capable of supporting one or two sensors 16-bit measurement resolution 0.5% measurement accuracy
Enclosure Size	8.9cm x 4.3cm x 2.2cm
Enclosure Weight Approx.	85grams
Enclosure Colour	Transparent blue
Installation	Snaps to base plate. Base plate mounts with screws or self adhesive tape
Operation Battery Type	2/3 A size LiMnO2 (e.g. Duracell DL123A)
Battery Life	Up to 5 years in ambient conditions
Operating Environment	$\cdot 10^\circ\text{C}$ to $60^\circ\text{C}/14^\circ\text{F}$ to 140°F up to 95% relative humidity (non-condensing)
Open Field Range	250 metres
RF Specification	868, 902-928 MHz, Spread Spectrum

DTK02

DTKWASH – Transmitter with

Dishwasher Sensor

Temperature Accuracy & Range - External	-30°C to 93°C/-22°F to 200°F Accuracy ±0.5°C/1°F
Sensor	Sensor constructed with PTFE coated cable application
Enclosure Size	8.9cm x 4.3cm x 2.2cm
Enclosure Weight	85grams
Enclosure Colour	Transparent blue
Installation	Snaps to base plate. Base plate mounts with self adhesive tape
Operation Battery Type	2/3 A size LiMn02 (e.g. Duracell DL123A)
Battery Life	Up to 5 years in ambient conditions
Operating Environment	-10°C to $60^\circ\text{C}/14^\circ\text{F}$ to 140°F , up to 95% relative humidity (non-condensing)
Open Field Range	250 metres
RF Specifications	868, 902-928 MHz, Spread Spectrum

Sensor Range & Accuracies

DTP1 - External Air Sensor	-30°C to 93°C (-22°F to 200°F) \pm 0.5°C/1°F
DTP2 - High Temp. Sensor	0°C to 150°C (32°F to 302°F) \pm 1.0°C/2°F
DTP3 - Low Temp. Sensor	-50°C to 60°C (-58°F to 140°F) \pm 0.5°C/1°F
DTP4 - Custom sensor	options between -200°C and 800°C available on request



Base Station and Memory Buffer

DTKBASE - Base Station Receiver

Power Requirements	11-14V DC, 80mA
Output Signal	9600 baud RS232 DB 9 connector
Operating Environment	$0^{\circ}C$ to $60^{\circ}C/32^{\circ}F$ to $140^{\circ}F$, up to 95% relative humidity (non-condensing)
Installation	Wall mounted, indoor
Dimensions	21cm x 14cm x 3.5cm



DTKBASEMEM - Base Station Receiver with integrated Memory Buffer

Power Requirements	2 Watts
Power	Power POE (48VDC 170mA), or Direct Supply (11-14VDC 500mA)
Dimensions	18cm x 27cm x 6cm
Operating Environment	0°C to $50^\circ\text{C}/32^\circ\text{F}$ to 122°F up to 95% relative humidity (non-condensing)
Installation	Wall mounted, indoor
Output signal	Ethernet 10/100 basset via CATS UTP (POE optional) 2 x Serial DB 9 way serial 3 $$
Processor	150MHz RDC CPU, Intel 486SX compatible
Onboard RAM	32MB SDRAM/1MB Flash
Storage	USB memory stick. Minimum 1GB
I/0	Maximum 2 x USB 2.0
Operating System	Linux

Signal Booster, Relay and LAN Convertor

DTKBOOST RF - Signal Booster

Power Requirements	Internal battery plus 12V AC, 0.5 Amps, external transformer supplied
RF Specifications	868, 902-928 MHz, Spread Spectrum
Operating Environment	-10°C to $60^\circ\text{C}/13^\circ\text{F}$ to 140°F, up to 95% relative humidity (non-condensing)
Open Field Range	250 metres
Installation	Wall mounted
Dimensions	21cm x 14cm x 3.5cm

DTRELAY - Serial Port Relay

Relay Specifications	8 Form C change-over relays Contact rating resistive load - 15A 24VDC, 15A 120VAC, 10A 240VAC Contact rating inductive load -5A (24VDC, 240AC, 120AC)
Power Requirements	9-12V at 500mA via 2.1mm DC power socket centre pin +ve PSU supplied
Data/Power Indication	LED
Communication	Serial Port maximum cable length >100m
Format	9600 baud, 8 data, 1 stop, no parity
Installation	Wall mounted
Dimensions	14cm x 11cm x 3.5cm

DTLAN - LAN Convertor incl Universal Power Supply

Serial Interface	Software-selectable RS232, RS422 or RS485 (2 and 4 wire support)
Network Interface	10Base-T/100Base-TX Ethernet port Software selectable Ethernet speed 10/100/Auto Software selectable Half/Full/Auto duplex
Connector	RJ45 or DB25F DCE serial port (Custom connector supplied)
Indicators	(LED) Power (green) 10/100 Link/Activity (green) 100/100 Link/Activity (green) Diagnostics (red) Status (green)
Processor Management	Lantronix Device Installer GUI, Serial
Power	9-30 VDC (1.5 Watts maximum consumption) 9-30 VDC on DB25F serial interface 3.3 VDC on serial interface
Operating Temperature	0°C to 60°C/32°F to 140°F
Storage Temperature	-40°C to 85°C/-40°F to 185°F
Dimensions	9.0cm x 6.4cm x 2.3cm (3.5in x 2.5in x 0.9in)
Weight	200grams

Kyros Server Configuration Base System

- Application + Database Server (Desktop PC/Laptop)
- Server Hardware
 - Intel Processor 2.0+ GHz (Pentium, Core Duo, Quad Core, Xeon)
 - 1GB RAM (Minimum)
 - 40GB Hard Drives**
 - Raid-1 2 (Optional)
 - ATA-100/SATA 7200 RPM (SCSI 10k/15k RPM)
 - Network Card 10/100 or 1000 MB
 - Serial Port (Or IOGear USB-Serial Adapter)
 - DVD/RW Drive
 - USB Ports

Server Software

- Microsoft Windows XP Professional (Service Pack 2 or 3)
- Microsoft Vista
- Microsoft Windows 7
- MySQL V5.1 Database (Included with installation)
- Apache XAMPP HTTP Server (Included with installation)

Web browser software.

- Compatible with (Microsoft Internet Explorer 6*, Internet Explorer 7 or higher, Mozilla Firefox 3 or higher, Apple Safari 4 or higher*, Google Chrome 2.0 or higher*, Opera 11 or higher*)
- Microsoft.NET framework 3.5 sp1 (available on installation)
- Adobe® Flash® Player (Included with installation if required)

* Internet Explorer 6, Safari, Chrome & Opera are only ok for viewing data and acknowledging alarms. They are not recommended for configuration. ** Approximately 0.1GB storage is required per sensor per year.



Kyros Medium System

Application + Database Server

Server Hardware

- Intel Processor 2.0+ GHz (Pentium, Core Duo, Quad Core, Xeon)
- 2GB RAM
- 2 x 80GB Hard Drives**
- Raid-1 2 (Optional)
- ATA-100/SATA 7200 RPM (SCSI 10k/15k RPM)
- Network Card 10/100 or 1000 MB
- Serial Port (Or IOGear USB-Serial Adapter)
- DVD/RW Drive
- USB Port

Server Software

- Windows Server 2003
- Standard 5 User License
- MySQL V5.1 Database (Included with installation)
- Apache XAMPP HTTP Server (Included with installation)

• Web browser software.

- Compatible with (Microsoft Internet Explorer 6*, Internet Explorer 7 or higher, Mozilla Firefox 3 or higher, Apple Safari 4 or higher*, Google Chrome 2.0 or higher*, Opera 11 or higher*)
- Microsoft.NET framework 3.5 sp1 (available on installation)
- Adobe® Flash® Player (Included with installation if required)

Kyros Large System – Split Server

Application Server Configuration

- Application Server Hardware
- Intel Processor 2.0+ GHz (Pentium, Core Duo, Quad Core, Xeon)
- 2GB RAM
- 2 x 40GB Hard Drives
- Raid-1 2
- ATA-100/SATA 7200 RPM (SCSI 10k/15k RPM)
- Network Card 10/100/1000 MB
- Serial Port (Or IOGear USB-Serial Adapter)
- DVD/RW Drive
- USB Port

Application Server Software

- Windows Server 2003
- Standard 5 User
- Microsoft .NET framework 3.5 sp1 (available on installation)
- Apache XAMPP HTTP Server (Included with installation)

Web browser software.

- Compatible with (Microsoft Internet Explorer 6*, Internet Explorer 7 or higher, Mozilla Firefox 3 or higher, Apple Safari 4 or higher*, Google Chrome 2.0 or higher*, Opera 11 or higher*)
- Adobe® Flash® Player (Included with installation if required)

Database Server Configuration

- Database Server Hardware
 - Intel Processor 2.0+ GHz
 - (Pentium, Core Duo, Quad Core, Xeon)
 - 3GB RAM
 - 2 x 80GB Hard Drives**
 - Raid-5
 - 3 disks (data)
 - 2 disks SQL Logs
 - ATA-100/SATA 7200 RPM (SCSI 10k/15k RPM)
 - Network Card 10/100/1000 MB
- DVD/RW Drive
- Database Server Software
 - Windows Server 2003
 - Standard 5 User License
 - MySQL V5.1 Database

* Internet Explorer 6, Safari, Chrome & Opera are only ok for viewing data and acknowledging alarms. They are not recommended for configuration. ** Approximately 0.1GB storage is required per sensor per year.