watch and warn.







Data Collection Terminal & Retmon EMS

About Data Collection Terminals	1
Technicial Specifications	2
Retmon EMS Interface	3
Sensors & Equipments	
Carbon Monoxide CO Sensor (1-Wire)	6
Carbon Dioxide CO2 / Air Quality Sensor (1-Wire)	7
Oxygen Sensor (1-Wire)	8
Airflow Sensor	9
Thermal Airflow Sensor with Thermal Effect	10
Alarm Siren (with Sound and Light)	11
Combo Temperature + Humidity Sensor (Sensing Type)	12
Combo Temperature + Humidity Sensor	13
0-20mA to 1-Wire Converter	14
PT100 to 1-Wire Converter	15
Magnetic Door Sensor	16
Ground-Neutral Voltage Sensor	17
1-Wire Sensor Multiplexer with 4 Ports	18
1-Wire Sensor Multiplexer with 7 Ports	19
IR Climate Control Sensor	20

Contents

Light Sensor (1-Wire)	21
Motion Sensor	22
1 Port DI Module (1-Wire)	23
Impact Sensor	24
Sound Sensor	25
Smoke Sensor	26
Temperature Sensor	27
Immersion Type Temperature Sensor	28
Temperature Sensor (1-Wire Sensing Type)	29
1-Phase Voltage Sensor	30
Water Leak Probe	31
Water Leak Probe Water Leak Probe (Standard)	31 32
Water Leak Probe Water Leak Probe (Standard) Water Leak Probe (String Type)	31 32 33
Water Leak Probe Water Leak Probe (Standard) Water Leak Probe (String Type) Water Leak Sensor (Probe WLC-01)	31 32 33 34
Water Leak ProbeWater Leak Probe (Standard)Water Leak Probe (String Type)Water Leak Sensor (Probe WLC-01)Water Leak Sensor (Probe WLC-02)	31 32 33 34 35
Water Leak ProbeWater Leak Probe (Standard)Water Leak Probe (String Type)Water Leak Sensor (Probe WLC-01)Water Leak Sensor (Probe WLC-02)Water Leak Sensor (Probe WLC-03)	31 32 33 34 35 36
Water Leak ProbeWater Leak Probe (Standard)Water Leak Probe (String Type)Water Leak Sensor (Probe WLC-01)Water Leak Sensor (Probe WLC-02)Water Leak Sensor (Probe WLC-03)3G Modem	31 32 33 34 35 36 37
Water Leak ProbeWater Leak Probe (Standard)Water Leak Probe (String Type)Water Leak Sensor (Probe WLC-01)Water Leak Sensor (Probe WLC-02)Water Leak Sensor (Probe WLC-03)3G ModemRetmon DCIM	31 32 33 34 35 36 37
Water Leak Probe Water Leak Probe (Standard) Water Leak Probe (String Type) Water Leak Sensor (Probe WLC-01) Water Leak Sensor (Probe WLC-02) Water Leak Sensor (Probe WLC-03) 3G Modem Retmon DCIM What's Retmon DCIM?	31 32 33 34 35 36 37 38

Data Collection Terminals & Retmon EMS



Data Collection Terminals

Termianls are used to measure, watch, save and control the environmental parameters such as temperature, humidity, smoke, air flow, etc. Alarms can be defined according to notifications and the EMS system warns you via SMS, E-Mail, Phone Call, Siren etc.

Terminals do not need any Computer/ Server connection and can work on its own. It's compatible with industrial standard sensors and provides reliable service. You can include reputable industrial communication standards and other industrial infrastructure equipment in the Retmon EMS system such as UPS, Generator, Air Conditioning Equipment via SNMP and Modbus protocols. You can extend the coverage of your EMS system with the sensor multiplexer HUB, which will connect to the sensor port. LAN/Ethernet is standard in the data collection terminal so, you can easily incorporate your data collection terminal into your local network.



It is designed to be mounted on wall and rack cabinet. Built-in IR climate control and water leakage sensor make it suitable to use in environments such as system rooms and pharmaceutical warehouses.



It is designed to be mounted on DIN rail to easily draw data from electrical panels. With built-in Wi-Fi, you can easily connect to the device. It supports Modbus RTU.





*Installation equipments are included in the package contents.



Technicial Specifications

Onboard Temperature and Humidity Sensor	1 Piece
Onboard Temperature Sensor Measurement Ra	nge 0/+60 °C
Onboard Temperature Sensor Sensitivity	Precision < %0.5
Onboard Humidity Sensor Measurement Range	Relative Humidity 0 - 100
Onboard Humidity Sensor Sensitivity	Precision < %3
Onboard Water Leak Sensor DCT210	1 Piece
RJ9-Digital Sensor Port (1-Wire)	1 Piece (Max. 16 Piece 1-Wire Sensor)
Max. 1-Wire Sensor Distance	50 m
Digital Input	4 Pieces (5 - 24 VDC)
Digital Output	2 Pieces (Max. 250 VAC/ 30 VDC)
Serial communication / RS485 DCT195	1 Piece
USB 2.0 Port	3 Pieces
HDMI Output	1 Piece
Onboard IR Port for A/C Control DCT210	with Retmon IR Module
External HDD, Keyboard, Mouse Connection	USB
Supply Voltage	5,8 VDC DCT210 / 24VDC DCT195
10/100 Ethernet	1 Piece
Power Consumption	10 w
Operating Temperature Range	0-60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Physical Measures	170x95x45 DCT210 60x90x85 DCT195
EMC Certificate	61000-6-4 / 61000-6-2
Product Warranty	1 Year
Network Protocols	HTTP, SNMP Traps, TCP Socket IO, MQTT, Modbus TCP, Modbus RTU DCT195

MQTT, Modbus TCP, Modbus RTU DCT19 WEIGAND (Lock Settings), FTP, SSH, TELNET

General Specifications

- Web based interface
- Customizable dashboard
- Alarm-Notification management
- Monitoring from the center
- Real-time tracking (Trend and Table)

Data Collection

Terminals

- Modbus TCP/RTU communication
- IP/USB camera support
- Built in Wi-Fi DCT195
- PT100 sensor support DCT210
- Dry contact sensor input (4pcs)
- Relay output (2 pcs)
- Infrared A/C control DCT210
- 3G modem support



Retmon EMS Interface

Retmon EMS interface is designed interactively to enhance user experience quality. It has a customizable structure and is easy to use. Compatible with all smart devices (computer, phone, tablet, etc.).

** *:															
-	0	Katon Nem		Kabri Çiy	0	Şebele	Freshinsi	1	Şebeke 226	Gerlini					
141 1		@retmonaza							200						
	115	E Destinard	Event Logs												
	95	E Banhar													
	**	The Bartings	Copy Excel PC	Only Time		ObjectTone		0	entitien Turne			Search			
	-	Aurin Dataitiona	142,148,5,15	24.01.2216 14.1728		Widget Position		0.0							
		IO & Services	100,100.0.10	24.012218 141728	~	Ridget Pastern		54							
		Rancis Centers	100,100,0.10	Gretmonaza											
	11000	Series .	192 198.5.15	Destoced	Tag Elditor										
		United	102.108.0.14	D. Martine (_			1000			10-1	Vertit		1000	-
		Evertiage	100,108.0.12	B Bettings	-	And America	Contraction of the					was.			Carr.
		Convertial	102.146.0.16	Agen Defetiers		Contraction of Contra	~~~		2				-		
		Denves	182.100.0.10	KD & Servers			Conces		-	- 6-6			- 1		
		Logost		Parricke Devices		Harto Scatton	Cliniterature	25.8	'e				. A.		
			Divising 1 to 10 of 50 am	Modern		Hanti Çiy	CHI dee	64	10				3		-
10250 10010000			Present 2	Dynam.		Internet and Electric	Cill temperature	NotConnected	т¢		80		3		-
Helmon Erm Derm Str. 167 107	2017 6 Karpak			Electop		Şebela Prekanu		50.02	NE		10	0	1		-
	_			Contact Las		Şabaka Ganîlani		(Sec.1)	¥.			e.	.1		
				Egiphere		Karapi Kap	Digital Input B	1	dighte						-
		MACHINE AND IN	_	Carried	- M - 1	a Digital Input	Digital Input 1	£	ages.		. 4		0		-
		WHEET LOOT			10	1.Oghi tuur	Digital Input 2		dighei				0		-
		Checker Diarter Lipsing IIIn Car nt "	2017 6 Konsek		10	4 Digital Input	Digital Input 3		eligital.		14		0		-
					100	Water Louis Service	Water Louis	¥	diplat						-
						1 State Chang	Digital Dubuk 0	-	-		14				
						1 Digital Cargour	Digital Output 1	1	dighei					1.4	-
					-	Samera TCP Muteria	Barrana TCP Municip		date	1.4					
				04.01.0018 14:18:57 to Alter 102 104.0 8		Sector Alexander		-							



Retmon EMS Interface



Sensors & Equipments





Carbon Monoxide (CO) Sensor ACS-01

Carbon monoxide sensor is detected at concentrations from 10 ppm to 10,000 ppm.

Technicial Specifications

Operating Voltage	5 VDC
Measurement Range	10-10000 ppm
Measurement Accuracy	< 10 ppm
Operating Temperature	0/+60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Current Drawn	< 300 mA
Emc Compliance	TS EN 61000-6-2
Dimensions	80 x 65 x 28 mm

* Our sensors show the actual environment values after 6 hours from the energization. The warm-up time of the sensors is 6 hours.



* It is important to install the carbon monoxide sensor at the proper location for efficient operation. The carbon monoxide sensor (ACS-01) must be installed in an area where it can measure.



Air Quality Sensor ACS-02

The ACS-02 Air Quality Sensor is used to measure the air quality of interiors. It detects the amount of carbon dioxide in the environment.



* It is important that the air quality sensor is installed at the proper location for efficient operation.



The ACS-02 Air Qualit quality of interiors. It dete





etmon

Technical Specifications

Operating Voltage	5 VDC
Measurement Range	0-5000 ppm
Measurement Accuracy	< 2 ppm
Operating Temperature	0/+60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Current Drawn	< 300 mA
Emc Compliance	TS EN 61000-6-2
Dimensions	80 x 65 x 28 mm

* Our sensors show the actual environment values after 6 hours from the energization. The warm-up time of the sensors is 6 hours.



5 VDC

0 - 25 % Vol

< %2

0 / +50 C°

%10 - %90 (non-Condensing)

2 Yıl

IP 40

1-Wire

< 300 mA

TS EN 61000-6-2

80 x 65 x 28 mm

Oxygen Sensor ACS-O3

The ACS-O3 Oxygen (O) sensor is used internally to measure the oxygen concentration in the air. It produces output according to the amount of oxygen in the ambient air.



* It is important that the oxygen sensor is installed at the proper location for efficient operation.



* Our sensors show the actual environment values after 6 hours from the energization. The warm-up time of the sensors is 6 hours.

Operating Voltage

Measurement Range

Measurement Accuracy

Operating Temperature

Product Warranty

Protection Class

Current Drawn

EMC Compliance

Dimensions

Operating Humidity Range

Communication Protocol



Air Flow Sensor AF-01

It is an air flow sensor with NO (Normally Open) NC (Normally Close) contact output options that are used in real time monitoring of ventilation fans, air vents of air conditioning systems.



You can connect one end of the dry contact connection cable of the AF-O1 airflow sensor to one of the Digital Input ports (DI1, DI2, DI3, DI4) and the other to the COM port.

Technical Specifications

Measurement Type	On / Off
Operating Temperature	-20 / +50 C
Operating Humidity Range	%10 - %90 (non-Condensing)
Protection Class	IP 20
Product Warranty	1 Year
Dimensions	34x17.5x7.5mm

Sensor Sensor Cover Fan



*The sensor should be positioned directly where the air flow is.



Air Flow Sensor with Thermal Effect AF-02

It is a sensor that produces a dry contact output according to specified air flow limits.



Technical Specifications

Operating Voltage	24 VDC
Measurement Range	100-400 cm/s
Operating Temperature	-10 / +50 C°
Operating Humidity Range	%10 - %90 (non-Condensing)
Protection Class	IP 54
Communication Type	Dry Contact (5-24 VDC)
Current Drawn	< 35 mA
Product Warranty	1 Year
Relay	3 A (30 VDC / 250 VAC),
Dimensions	140mm x Ø 23mm



*The sensor should be positioned directly where the air flow is.







Alarm Siren ALS-01



Technical Specifications

Operating Voltage	12-29 VDC
Operating Temperature	-25 / +70 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Power consumption	1,75 W/24 V
Maximum Current	73,5 mA/ 24 V
Warning Light Pink	Red
Sound Power	95.6 dB
Number of Melodies	32
Dimensions	Ø100mm x 98mm

*The alarm siren should be installed at a height of at least 2 meters above ground level and where the relevant personnel can hear the siren sound.



It is a device that gives audible, illuminated warning, suitable for indoor use and for critical alarms situations.

Siren Connection

Power Supply

1- Connect the "+" (Red) side of the power supply to the "+" socket of the siren. 2- Connect the "-" (Black) side of the power supply to the DO1 (Digital Output/Digital Output) socket of the data acquisition terminal (LTS210). 3- Connect the COM socket on the right side of DO1 socket and cable socket 1 or 2 on the siren.



DO1 COM DO2 COM DI1 DI2 DI3 DI4 COM



0 0





Combo Temperature/Humidity Sensor CHTS-01

Combo Temperature/Humidity sensor; designed for indoor environments, allowing you to measure the ambient humidity and temperature.

Sensor Connection



*Mounting of the sensor must be done at a point that will not be exposed directly to the air flow (Air conditioning and Fan outlets).

Technical Specifications

Operating Voltage	3.3 VDC
Temperature Measurement Range	0 ∕ +60 °C
Humidity Measurement Range	0 - 100 % RH
Temperature Measurement Accuracy	< 0,1 °C
Humidity Measurement Accuracy	% 3
Operating Temperature	0 / +70 °C
Operating Humidity Range	%0 - %100 (non-Condensing)
Operating Humidity Range Product Warranty	%0 - %100 (non-Condensing) 2 Years
Operating Humidity Range Product Warranty Protection Class	%0 - %100 (non-Condensing) 2 Years IP 40
Operating Humidity Range Product Warranty Protection Class Communication Protocol	%0 - %100 (non-Condensing) 2 Years IP 40 1-Wire
Operating Humidity Range Product Warranty Protection Class Communication Protocol Current Drawn	%0 - %100 (non-Condensing) 2 Years IP 40 1-Wire < 10 mA







Combo Temperature and Humidity Sensor CHTS-02

Combo Temperature and Humidity sensor; designed for indoor environments, allowing you to measure the ambient humidity and temperature.

Technical Specifications

Operating Voltage	3.3 VDC
Temperature Measurement Range	0 / +60 °C
Humidity Measurement Range	0 - 100 % RH
Temperature Measurement Accuracy	< 0,1 °C
Humidity Measurement Accuracy	% 3
Operating Temperature	0 / +70 °C
Operating Humidity Range	%0 - %100 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Current Drawn	< 10 mA
EMC Compliance	TS EN 61000-6-2
Dimensions	80x65x28mm



*Mounting of the sensor must be done at a point that will not be exposed directly to the air flow (Air conditioning and Fan outlets). It can be mounted on a wall or a dome.





0-20 mA / 1-Wire Converter CONM-02

It allows you to transfer the analog input signal to the Data Collection Terminal by converting it to the 1-Wire Digital communication protocol in the range of 0-20mA.



1-Wire connector connection





Technical Specifications

Operating Voltage	3.3 VDC
Measurement Range	0 - 20 mA
Measurement Accuracy	< 0,02 mA
Operating Temperature	0 / +60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Current Drawn	< 20 mA
EMC Compliance	TS EN 61000-6-2
Dimensions	80x65x28mm





Technical Specifications

Operating Voltage	3.3 VDC
Measurement Range	-100 / +200 °C
Measurement Accuracy	< 0,5 °C
Operating Temperature	0 / +60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Current Drawn	< 20 mA
EMC Compliance	TS EN 61000-6-2
Dimensions	80x65x28mm

PT100 / 1-Wire Converter CONP-01

It is a converter that produces output in the 1-Wire protocol compatible with industrial type PT100 RTDs.

Converter Connection



1-Wire connector connection









Technical Specifications

Measurement Type	On / Off
Operating Temperature	-40 ∕ +65 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Protection Class	IP 68
Communication Protocol	NO/NC Dry Contact
Product Warranty	2 Years
Dimensions	63.5 x 19 x 12.7 mm

Magnetic Door Sensor **DS-01**

Sensor Connection





Ground-Neutral Voltage Sensor GNVS-01

In order to ensure the safe and healthy operation of electrical equipment, it is desirable that the maximum voltage between the phase and neutral lines of the energy line to which they are connected is maximum 1.5-2V. The voltage between this sensor and ground-neutral can be monitored, recorded and an alarm can be defined for the set threshold values.





Technical Specifications

Operating Voltage	12 VDC
Input	AC 0 - 10V
Output	DC 4 - 20mA
Measurement Accuracy	< %2
Operating Temperature	0 / +60 C°
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Dimensions	105 x 70 x 23 mm



HUB-04 4 Part HUB (I-Wirej WWW Tesman com

Technical Specifications

Operating Voltage	3.3 VDC
Operating Temperature	0 / +60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Number of Ports	4
EMC Compliance	TS EN 61000-6-2
Dimensions	30 x 24 x 34 mm

1-Wire Port Multiplexing Hub HUB-04

It is used to increase the number of 1-Wire ports when mounting 1-Wire sensors to different locations.

Multiplexer Connection





Technical Specifications

Operating Voltage	3.3 VDC
Operating Temperature	0 / +60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Number of Ports	7
EMC Compliance	TS EN 61000-6-2
Dimensions	122 x 39x 29 mm

1-Wire Port Multiplexing Hub HUB-07

It is used to increase the number of 1-Wire ports when mounting 1-Wire sensors to different locations.

Sensor Connection







Specifications

Operating Voltage	3.3 VDC
Operating Frequency	38 kHz
Operating Temperature	0/ +60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Current Drawn	< 20 mA
EMC Compliance	TS EN 61000-6-2
Dimensions	80 x 65 x 28 mm

Infrared Sensor Climate Control Sensor IRS-01

Infrared remote control is used to control air conditioners. The basic functions of the remote control are introduced to the system via the IRS-01 sensor, allowing remote control.

Sensor Connection





Envoirement	ldeal Ligh t ing Violence (Lux)
Corridors and storage areas	100
Office work	500
Surface preparation and painting	750
Assembly, quality control and color control	1000



*The light sensor must be mounted in a position where it is not directly exposed to the light.



Light Sensor

Used internally, it is a sensor that can measure in the range of 0-5000 lux.

LHT-01



Motion Sensor MS-01

It is the sensor used to detect live motion indoors.



Technical Specifications

Operating Voltage	12 VDC
Measurement Range	12 m
Operating Temperature	0 / +55 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	NC Dry Contact
Current Consumption	< 20 mA
Dimensions	105 x 61 x 44 mm

*To be able to operate the sensor efficiently, the height of the installation site should be 2.20m - 2.70m.



*You can connect the Normally Close contact of the sensor to any of the Digital Inputs.





1-Wire 1 Port DI Module OWDI-01

A converter that converts the 1-Wire port into a digital input.

1-Wire Uplink

Sensor Connection







1-Wire connector connection

Technical Specifications

Operating Voltage	3.3 VDC
Operating Temperature	0 / +60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Current Drawn	< 20 mA
Digital Inputs	1(5-24 VDC)
EMC Compliance	TS EN 61000-6-2
Dimensions	80 x 65 x 28mm



0

Impact Sensor SHC-01



Connect the DI (Digital Input) end of the sensor to any of the DI (Digital Input) ports (DI1 to DI4) and the COM end to the COM end of the Data Collection Terminal (LTS210).

Technical Specifications

Operating Voltage	9 - 16 VDC
Operating Temperature	0 / +55 °C
Operating Humidity Range	%10 - %95 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	On / Off Dry Contact
Current Consumption	< 20 mA
Dimensions	26 x 85 x 24mm
· · · · · · · · · · · · · · · · · · ·	7



The impact sensor (SHC-O1) can be mounted on the edge of the window/door, cabinet and cabinet doors.



SNDS-01

Sound Sensor SNDS-01

It measures the level of the sound in the environment and help to maintain the noise level.

1-Wire Uplink

[m]

П

Sensor Connection





1-Wire connector connection

Technical Specifications

Operating Temperature	0 / +60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Protection Class	IP 40
Communication Type	1-Wire
Product Warranty	1 Year
EMC Compliance	TS EN 61000-6-2
Dimensions	80 x 65 x 28 mm





*It is important that the smoke sensor is installed at the proper location for efficient operation. The smoke sensor (SS-01) should be installed in an area in the open space where it will not be exposed to direct air flow. (Example: ceiling, wall etc.)





etmor SS-01

Smoke Sensor SS-01

It is a sensor (NO / NC) that senses the smoke generated in flammable, flameless fires in closed spaces and generates a dry contact output.

Sensor Connection

retroit Vertification Vertific

Turn the rear cover of the sensor clockwise to make the cable connection between the Data Collection Terminal and the Smoke Sensor.



Technical Specifications

Operating Voltage	12 VDC
Operating Temperature	0 / +50 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	NC/NO Dry Contact
Current Drawn	< 40 mA

*It is important that the smoke sensor is installed at the proper location for efficient operation. The smoke sensor (SS-O1) should be installed in an area in the open space where it will not be exposed to direct air flow. (Example: ceiling, wall etc.)





TS-01

Temperature Sensor TS-01

It is a sensor used to make temperature measurement at -50 / + 60 ° C suitable for operation in an indoor environment.

Sensor

Technical Specifications

Operating Voltage	3.3 VDC
Temperature Measurement Range	-50 / +60 °C
Temperature Measurement Accuracy	0,5 °C
Operating Temperature	-55 / +65 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Current Drawn	< 10 mA
EMC Compliance	TS EN 61000-6-2
Dimensions	80 x 65 x 28mm



*Mounting of the sensor must be done at a point that will not be exposed directly to the air flow (Air conditioning and Fan outlets). It can be mounted on a wall or a dome.







Operating Voltage	3.3 VDC
Temperature Measurement Range	-100 / +200 °C
Temperature Measurement Accuracy	< ± 0,5 °C
Operating Temperature	-110 / +210 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 65
Measurement Method	Resistance
Current Drawn	< 20 mA

*You can mount the CONP-01 (PT100 / 1-Wire converter) sensor unit out of the cabinet where the sensor PT100 probe is to be measured as shown in the sample installation.



Temperature Sensor TS-02

It is an industrial type temperature sensor capable of measuring between -100/+200 ° C.

Sensor Connection

) **.**....**.**



-Wire	connector	connection
	001111000001	0011110001011





1-Wire

00

WL



0000000000

DO1 COM DO2 COM DI1 DI2 DI3 DI4 COM





Temperature Sensor TS-03

It is a sensor capable of measuring temperature in the range of -50/+100 ° C suitable for working indoors.

Sensor Connection



*It must be installed at a point that is not exposed to direct air flow (Air conditioning and Fan outlets). It can be used in interior and exterior temperature projects of server cabinets in data centers.



Technical Specifications

Operating Voltage	3.3 VDC
Temperature Measurement Range	-50/+100 °C
Temperature Measurement Accuracy	0,5 °C
Operating Temperature	-55/ +110 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	1-Wire
Current Drawn	< 20 mA
EMC Compliance	TS EN 61000-6-2





1-Phase Voltage Sensor VSK-01

It is a sensor that measures electricity as a dry contact (NO/NC) by connecting to the electric line to be watched.

Sensor Connection

1- Connect the open ends of the voltage sensor to any DI (Digital Input) port.2- Connect the voltage sensor to the power line you want to monitor.

Technical Specifications

Operating Voltage	220 VAC
Measurement Range	200 - 230 VAC
Operating Temperature	0/+60°C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 40
Communication Protocol	NC (Normally Closed) Dry Contact
Current Drawn	< 100 mA
EMC Compliance	TS EN 61000-6-2



*Connect one of the normally closed (NC) contact terminals of the VSK-01 Voltage Sensor to one of the DI terminals (DI1 to DI4) of the Data Collection Terminal and the other end to the COM port.





Water Leak Sensor Probe WLC-01



*It is important for the water leakage sensor probe to be able to work efficiently and to clean the surface where the water is to be installed and dust from the surface where the water leakage may occur. For example, in data centers, server rooms can be floor mounted just below climates.

Sensor Connection



Adjust the probes so that the copper feet are in contact with each other by turning and secure the probe with the screw-dowel.





The probe tips of the sensor probe must be connected to the WL (Water Leak) port of the Data Collection Terminal.

Technical Specifications

Operating Temperature	0∕+60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 65
EMC Compliance	TS EN 61000-6-2



Operating Temperature

Product Warranty

Protection Class

EMC Compliance

Dimensions

Operating Humidity Range

Water Leak Sensor Probe WLC-02

The WLC-O2 water leak sensor probe is a product you can use by connecting it to the WL (Water Leak) port on the Data Collection Terminal.



*It is important for the water leakage sensor probe to be able to work efficiently and to clean the surface where the water is to be installed and dust from the surface where the water leakage may occur. For example: In data centers, server rooms can be floor mounted just below climates.





Operating Voltage 3.3 VDC Measurement Range 1 - 3 VDC **Operating Temperature** 0/+60°C **Operating Humidity Range** %10 - %90 (non-Condensing) **Product Warranty** 2 Years Protection Class IP 65 **Current Consumption** < 10 mA **EMC** Compliance TS EN 61000-6-2

Rope Type Water Leak Sensor WLC-03

It is a rope-type sensor used to detect water leaks. It provides a wide range of coverage by detecting leaks or foul lines along the sensor line.

Probe Connection

Connect the open ends of the sensor to the Water Leak (WL) input on the terminal.



WLC-03 Probe Mounting



*It is important for the water leakage sensor probe to be able to work efficiently and to clean the surface where the water is to be installed and dust from the surface where the water leakage may occur. For example: In data centers, server rooms can be floor mounted just below climates.



Water Leak Sensor WLS-01 (Probe WLC-01)

Probe

Floor



Operating Voltage	3,3 VDC
Measurement Range	1 - 3 VDC
Operating Temperature	0/+60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 65
Communication Protocol	1-Wire
Current Drawn	< 10 mA
EMC Compliance	TS EN 61000-6-2
Dimensions	80 x 65 x 28 mm

*For the water leak sensor to work properly, it must be installed at a location higher than the ground and dry in the event of a water leak/repression.





Probe Floor Mounting WLC-01

*It is important for the water leakage sensor probe to be able to work efficiently and to clean the surface where the water is to be installed and dust from the surface where the water leakage may occur. For example: In data centers, server rooms can be floor mounted just below climates.





-	1	P	3	
WLC-OR				
-		1		

Technical Specifications

Operating Voltage	3,3 VDC
Measurement Range	1 - 3 VDC
Operating Temperature	0/+60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 65
Communication Protocol	1-Wire
Current Drawn	< 10 mA
EMC Compliance	TS EN 61000-6-2
Dimensions	80 x 65 x 28 mm

*For the water leak sensor to work properly, it must be installed at a location higher than the ground and dry in the event of a water leak/repression.





*It is important for the water leakage sensor probe to be able to work efficiently and to clean the surface where the water is to be installed and dust from the surface where the water leakage may occur. For example: In data centers, server rooms can be floor mounted just below climates.







Technical Specifications

Operating Voltage	3,3 VDC
Measurement Range	1 - 3 VDC
Operating Temperature	0/+60 °C
Operating Humidity Range	%10 - %90 (non-Condensing)
Product Warranty	2 Years
Protection Class	IP 65
Communication Protocol	1-Wire
Current Drawn	< 10 mA
EMC Compliance	TS EN 61000-6-2
Dimensions	80 x 65 x 28 mm

*For the water leak sensor to work properly, it must be installed at a location higher than the ground and dry in the event of a water leak/repression.



Sensor Connection

Connect the open ends of the sensor to the Water Leak (WL) input on the terminal.

Water Leak Sensor

(Probe WLC-03)

WLS-01



Probe Floor Mounting WLC-03



* It is important for the water leakage sensor probe to be able to work efficiently and to clean the surface where the water is to be installed and dust from the surface where the water leakage may occur. For example: In data centers, server rooms can be floor mounted just below climates.



USB Port SIM Card Slot Micro SD Card Slot External Antenna Connection Indicator Light

If the indicator light is green, GPS/EDGE is enabled, If it is blue, 3G/HSUPA is enabled.

Technical Specifications

Operating Voltage	5 VDC
Operating Temperature	-10/+70 °C
Operating Humidity Range	%5 - %95 (non-Condensing)
Product Warranty	2 Years
Current Drawn	500 mA
Dimensions	86.5 x 25.5 x 12.5 mm

How to place SIM Card



4

False 🗙

True 💊

USB Modem

3GM-01

- **1-** Remove the cover of the modem.
- 2- Remove the SIM card slot.
- **3-** Insert the SIM card into the slot.
- Put the SIM card slot back in the modem. (SIM card facing the modem).

Modem Connection



False 🗙

Retmon DCIM





What's Retmon DCIM?

Retmon DCIM is the software that analyzes and manages Data Center operations. It can monitor and manage the Data Centers or System Rooms in different regions as a master. It is software that enables reporting and monitoring of all critical situations that need to be audited for system continuity such as temperature map, humidity map, UPS status, air conditioning activities, momentary energy situations and so on.



Retmon DCIM has Data Center Asset Management, Cable Management, Job Order Tracking, Change Management modules that allow full management of Data Center areas.

Retmon DCIM is a structure that allows identification of remote limit values, modification of corridor plans and loading of devices. It is managed via a standard web browser to provide management simplicity.



It supports all systems of vital importance for data centers such as security switching systems, closed circuit camera systems, energy room management systems. It allows for single-centered monitoring of these systems and contingency plans.

Retmon DCIM system supports SNMP and Modbus TCP/IP. It can be opened and supported in different general and specific protocols if desired. This support can be in the form of an add-on without having to update the version.

What does Retmon DCIM offer?

- Monitoring of data center or system room conditions, live image monitoring with 3D thermal maps.
- Data center input-output information to be monitored in a controlled and secure way.
- Calculation of data center energy consumption and power distributions and creation of alarms.
- Follow-up of power interruptions via single line scheme.
- Listing and management of assets in the units in the Data Center.
- Automatic notification of changes in assets, maintenance times and warranty periods in advance.
- Delivery and registration of work orders created for data center management to related persons.
- Establishment of the management and topography of the cables connected to the assets.

Energy Monitoring

The Retmon energy system allows you to monitor your energy distribution system online via a single line schematic. With the dry contact information from the breakers, you can see which line is active, which is inactive and can be changed manually. The Retmon Energy system can report your consumption information according to the desired time interval (instant, daily, monthly etc.) by looking at the data coming from your energy distribution line. Thus, you can measure your energy efficiency.



Retmon DCIM

Reporting



The tools available under the Reporting module allow you to list all work orders, changes, and data that are recorded retroactively. Reports are important for recording and tracking generated data and provide periodic

control of data center management. In addition to this, precautions can be taken against emergency situations with the reporting management which is defined by the parameters in the system.

It has reports on the alarm range, temperature and humidity values, PDU and Energy values, which are generated on the basis of the selected range and unit location and the date range determined in the reporting system. When an emergency situation arises due to the established alarm scenario, it may periodically send an e-mail or SMS to the related units. In order to generate an alarm, limits can be defined on the upper and lower limits and how many times it should be observed.

Monitoring and Management Center

Retmon DCIM is based on the principle of collecting, storing and reporting the rooms, facilities, buildings, data on the internet, digital, analogue, Modbus and SNMP protocol.

Terminal reaches to the system through the PLC, energy analyzers, PDU and sensors such as temperature, humidity, water leak, connected to the data collection unit, reaches to Retmon communication and event management service.



Energy Consumption and Reporting



Retmon provides easy access to electricity consumption details (current, voltage, power coefficient, harmonics) and allows you to manage the system on demand. It can generate reports. The PUE values of the data center or other fields can be monitored online.

Required data are collected from energy analyzers or counters via SNMP, Modbus RTU and TCP / IP. All data can be saved independently of each other at the desired frequency. This ensures that the critical data is at the desired resolution. Insignificant data do not occupy space in the database.





Alarm Management

The Alarm System Module works with the user-specified scenarios. These scenarios can change sensor, input conditions and output actions, threshold values individually or in groups. Different alarm levels can be determined with the alarm system and different

actions can be requested at each level. When this structure needs to be able to define very complex algorithms. It executes the rules or rule sequences written in java script language.

Alarm rule management can receive or give information from another system. Integration with the other systems to communicate with the alarm rule management system can access the database of the 3rd system. Time-based alarms allow the necessary maintenance procedures to be followed.



Asset Management

The Asset Management (Inventory Management) module follows the inventory setup and changes in the system. This makes it easier to manage your system and reduces your management costs.

Retmon DCIM Asset Management Module allows you to extract inventory of software and hardware which are connected to the network. It also helps you to make analyzes in the operating system, hardware and software.

With the Asset Management Module, it is easy to find out which cabin is most suitable for energy and space for new fittings. In this way, you can manage your Data Center more efficiently.

Cable Management

It monitors all of your structural cabling within the Data Center on a port basis. This reduces your maintenance and change costs and provides significant time savings for possible malfunction interventions. The connections made with the DCIM Cable are monitored and controlled. Thanks to coordinated work with DCIM Asset, you can track which port is empty and where it is connected in exchange or setup.



Cable Management, designed as a module of Retmon DCIM software; It manages cabinets, racks and cables in Data Centers, telecommunication equipment and enterprise cabling applications. The Cable Management module is designed to configure and monitor the cabling infrastructure to protect innovative cable management features, increase network security and reduce operational costs.

Cable management is connected to a well-planned cable network. Cable management module can create cable topologies. you can follow the entire cable hierarchy between two points. The location management of the cables in the Data Center makes it possible to easily identify system failures. In this way, it helps to be able to intervene in case of a breakdown.

Work Order Management



All operations related to Data Center and peripherals can be managed easily with one time or periodically via the Work Order Management module.

Plans and assigns work assignments such as installation, change, cabling details, maintenance and repairs, start / finish date, resource planning, theoretical and practical duration and documentation of fixtures.



Maintenance Management



Maintenance and repair schedules of all the tools in the Data Center and peripherals are controlled through this module. The user can define periodic or one-time inspection for maintenance and repair labels. It allows you to specify the start/end dates and alarm dates of the tags.

Automatically generate alerts and notify them with the assigned maintenance documentation. Job completion reports can be tracked through the system. All operations on a product are interrogated on a detailed basis.

Change Management

С С С You can design and simulate changes to the Data Center before it starts. Changes can be recorded and sorted by date. Inventory-based reports can be received and simulated. With these simulations, the plans and changes are automatically made into work orders and followed up.

With the Change Management module, you can track all change plans and work orders online. The module can be integrated with an automated smart tag system. You can group the tags and easily manage changes to make stock follow-up.





KONZEK TEKNOLOJİ SAN. ve TİC. A.Ş.

www.retmon.com info@retmon.com

P: +90 (216) 392 16 42 **F:** +90 (216) 392 16 43

Aydıntepe Mah. Sahil Yolu Cad. Alize İş Merkezi No: 191/103-A Kat: 3 Tuzla/İstanbul PK: 34947



Retmon bir Konzek Teknoloji markasıdır. www.konzek.com