



# SIGNALLING SYSTEMS

Sintra products are manufactured according to the traffic and road safety standards.

Sintra products are used in 81 cities in Turkey and used in more than 50 countries around the world.

Power LED Signal Heads: TS EN 12368 certificated Power LED modules with IP 65 protection level. All housing materials are made of %100 UV PC.

Controllers: TS EN 50556 certificated, modular structure, green wave system adaptable, central software supported, programmable via computer, microprocessor based CPU.

Audible Pedestrian Signal: Audible signal for blinds, RILSA standards, warning signal voice level is arranged automatically according to the environment.

Infrastructure Equipments: Galvanized Signalling Poles with Highways and Municipality standards, corrosion resistant.



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#### YERLİ ÜRETİM **TS EN 12368** SINTRA POWER LED SIGNAL HEADS

Diameter Housing / Mask Material Type Polycarbonate (%100 PC) Housing Color LED Light Distribution **Power Factor** Phantom Class Power Consumption Certificate

200 mm Black / Grey-Black Fresnel Lens PF>0.9. THD<%20 5 8 Watt / Module TS EN 12368:2015

#### Product Types and Codes:

SN-04-02-200 Ø 200 mm Vehicle Signal Head with Sintra Power LEDs (Black / Sintra Housing) SN-01-02-200 | Ø 200 mm Vehicle Signal Head with Sintra Power LEDs (Black / Standard Housing) SN-04-02-300 Ø 300 mm Vehicle Signal Head with Sintra Power LEDs (Black / Sintra Housing) SN-01-02-300 Ø 300 mm Vehicle Signal Head with Sintra Power LEDs (Black / Standard Housing) SN-04-02-275 Ø 200 mm Single Signal Head with Sintra Power LEDs (Black / Sintra Housing) SN-01-02-275 Ø 200 mm Single Signal Head with Sintra Power LEDs (Black / Standard Housing) SN-04-02-350 Ø 300 mm Single Signal Head with Sintra Power LEDs (Black / Sintra Housing) SN-01-02-350 Ø 300 mm Single Signal Head with Sintra Power LEDs (Black / Standard Housing) SN-04-02-201 Ø 200 mm Vehicle Signal Head with Arrow Figure (Black / Sintra Housing) SN-01-02-201 | Ø 200 mm Vehicle Signal Head with Arrow Figure (Black / Standart Housing) SN-04-02-301 Ø 300 mm Vehicle Signal Head with Arrow Figure / Sintra Power LEDs (Black / Sintra Housing) SN-01-02-301 Ø 300 mm Vehicle Signal Head with Arrow Figure / Sintra Power LEDs (Black / Standard Housing) SN-04-02-250 Ø 200 mm Pedestrian Signal Head with Sintra Power LEDs (Black / Sintra Housing)

SN-01-02-250 Ø 200 mm Pedestrian Signal Head with Sintra Power LEDs (Black / Standard Housing)







## SINTRA 200 MM POWER LED TRAFFIC SIGNAL MODULE SY-01-041

Diameter Front Shell Color **Light Intensity Light Source Power Consumption** 8W **Operating Voltage** Phantom Class 5 **Power Factor** Total Harmonic Distortion (THD) <20% **IP** Class Weight Certificates **Operating Temperature** 

200 mm Tinted, Clear Red, Yellow, Green 400-800 cd Power LED 8W 220-240 V AC 50/60 Hz 5 >90% <20% IP 65 700 g TS EN 12368:2015 -40°/+60°C





### SINTRA 300 MM POWER LED TRAFFIC SIGNAL MODULE SY-01-046

Diameter 300 mm Front Shell Tinted, Clear Red, Yellow, Green Color 400-800 cd Light Intensity **Light Source** Power LED **Power Consumption** 8W 220-240 V AC 50/60 Hz **Operating Voltage Phantom Class** 5 >90% **Power Factor** Total Harmonic Distortion (THD) <20% **IP** Class IP 65 Weight 1100 g Certificates TS EN 12368:2015 **Operating Temperature** -40°/+60°C



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# **POWER LED SIGNAL HEADS (ASYA)**

Ø 100 mm : Diameter (LED Module) LED Type / Color Ø 200 mm & Ø 300 mm : Diameter Housing /Mask Material Type Polycarbonate (% 100 PC) Housing Color LED Power Consumption Certificate (IP Class) Phantom Class

100 mm 5 mm LED / Red, Yellow, Green

200 mm / 300 mm Black / Grey-Black Power LED / Red, Yellow, Green 7 Watt / Module TS EN 12368 : 2015, IP 65 3

#### Product Types and Codes:

SN-01-01-109: Ø100 mm Vehicle Signal Head with LEDs (Black / Asya Housing) SN-01-01-111: Ø100 mm Pedestrian Signal Head with LEDs (Black / Asya Housing) SN-01-01-200: Ø200 mm Vehicle Signal Head with Power LEDs (Black / Standard Housing) SN-04-01-200: Ø200 mm Vehicle Signal Head with Power LEDs (Black / Sintra Housing) SN-01-01-250: Ø200 mm Pedestrian Signal Head with Power LEDs (Black / Standard Housing) SN-04-01-250: Ø200 mm Pedestrian Signal Head with Power LEDs (Black / Sintra Housing) SN-01-01-275: Ø200 mm Single Signal Head with Power LEDs (Black / Standard Housing) SN-04-01-275: Ø200 mm Single Signal Head with Power LEDs (Black / Sintra Housing) SN-01-01-300: Ø300 mm Vehicle Signal Head with Power LEDs (Black / Standard Housing) SN-04-01-300: Ø300 mm Vehicle Signal Head with Power LEDs (Black / Sintra Housing) SN-01-01-350: Ø300 mm Single Signal Head with Power LEDs (Black / Standard Housing) SN-04-01-350: Ø300 mm Single Signal Head with Power LEDs (Black / Sintra Housing) SN-01-01-290: Ø200 mm Vehicle Signal Head with Arrow Figure / Power LEDs (Black / Standard Housing) SN-04-01-201: Ø200 mm Vehicle Signal Head with Arrow Figure / Power LEDs (Black / Sintra Housing) SN-01-01-380: Ø300 mm Vehicle Signal Head with Arrow Figure / Power LEDs (Black / Standard Housing) SN-04-01-301: Ø300 mm Vehicle Signal Head with Arrow Figure / Power LEDs (Black / Sintra Housing) SN-01-01-251 Ø200 mm Double Signal Head with Power LEDs Red\Green (Black / Standard Housing) SN-04-01-255 Ø200 mm Double Signal Head with Power LEDs Red\Green (Black / Sintra Housing)







# **POWER LED SIGNAL HEADS (GE)**

Diameter Hosing/Mask Material Type Housing Color LED Power Consumption Light Distribution Phantom Class Sertifika 200 mm / 300 mm Polycarbonate (%100 PC) Black / Grey-Black Power LED / Red, Yellow, Green 8 Watt / Module Fresnel Lens 5 TS EN 12368:2015

#### Product Types and Codes:

SN-01-20-200: Ø 200 mm Vehicle Signal Head with GE Power LEDs (Black / Standard Housing) SN-04-20-200: Ø200 mm Vehicle Signal Head with GE Power LEDs (Black / Sintra Housing) SN-01-20-250: Ø200 mm Pedestrian Signal Head with GE Power LEDs (Black / Standard Housing) SN-04-20-250: Ø200 mm Pedestrian Signal Head with GE Power LEDs (Black / Sintra Housing) SN-01-20-275: Ø 200 mm Single Signal Head with GE Yellow Power LEDs (Black / Standard Housing) SN-04-20-275: Ø 200 mm Single Signal Head with GE Yellow Power LEDs (Black / Sintra Housing) SN-01-20-300: Ø300 mm Vehicle Signal Head with GE Power LEDs (Black / Standard Housing) SN-04-20-300: Ø300 mm Vehicle Signal Head with GE Power LEDs (Black / Sintra Housing) SN-01-20-350: Ø 300 mm Single Signal Head with GE Yellow Power LEDs (Black / Standard Housing) SN-04-20-350: Ø300 mm Single Signal Head with GE Yellow Power LEDs (Black / Sintra Housing) SN-01-20-220: Ø200 mm Vehicle Signal Head with Arrow Figure / GE Power LEDs (Black / Standard Housing) SN-04-20-201: Ø200 mm Vehicle Signal Head with Arrow Figure / GE Power LEDs (Black / Sintra Housing) SN-01-20-305: Ø300 mm Vehicle Signal Head with Arrow Figure / GE Power LEDs (Black / Standard Housing) SN-04-20-301: Ø300 mm Vehicle Signal Head with Arrow Figure / GE Power LEDs (Black / Sintra Housing)











## **100MM SIGNAL HEAD** WITH POWER LEDS

Diameter (LED module) Housing / Mask Material Type Polycarbonate (% 100 PC) Housing Color LED Light Distribution **Power Consumption** PF and THD

100 mm Black / Grey-Black Power LED / Red, Yellow, Green Fresnel lens and grey front lens 5 Watt PF>0,90 and THD <0,20



#### Product Types and Codes:

SN-04-01-100 Ø100 mm Vehicle Signal Head with Power LEDs (Black / Sintra Housing) SN-04-01-101 Ø100 mm Power LED Signal Head with Triple Bicycle Figure (Black-Sintra Housing) SN-04-01-150 Ø100 mm Pedestrian Signal Head with Power LEDs (Black-Sintra Housing)/ SN-04-01-152 Ø100 mm Power LED Signal Head with Double Bicycle Figure (Black-Sintra Housing) SN-04-01-121 Ø 100 mm Single Signal Head with Yellow Power LEDs (Black / Sintra Housing)

# 200 MM STOP / WALK SIGNAL HEAD WITH LEDS SN-01-45-200

Diameter Housing Material Housing Color LED **Light Distribution** Power Consumption Certificates **Operating Voltage** 

200 mm Polycarbonate (% 100 PC) Black / Grey-Black 9 mm / Red, Green Fresnel lens and grey front lens 7 W / Module IP 65 12 V DC / 24 V DC / 220 V AC







# **SIGNAL HEAD WITH 5MM LEDS**

Diameter Housing / Mask Material Type Polycarbonate (%100 PC) Housing Color LED Power Consumption Certificates

200 mm / 300 mm Black / Grey-Black 5 mm Transparent / Red, Yellow, Green 12 Watt - 18 Watt / Module TS EN 12368

#### **Product Types and Codes:**

SN-01-40-200: Ø200 mm Vehicle Signal Head with 5 mm LEDs (Black / Standard Housing) SN-04-40-200: Ø200 mm Vehicle Signal Head with 5 mm LEDs (Black / Sintra Housing) SN-01-40-250: Ø200 mm Pedestrian Signal Head with 5 mm LEDs (Black / Standard Housing) SN-04-40-250: Ø200 mm Pedestrian Signal Head with 5 mm LEDs (Black / Sintra Housing) SN-01-40-275: Ø200 mm Single Signal Head with 5 mm LEDs (Black / Standard Housing) SN-04-40-275: Ø200 mm Single Signal Head with 5 mm LEDs (Black / Sintra Housing) SN-01-40-300: Ø300 mm Vehicle Signal Head with 5 mm LEDs (Black / Standard Housing) SN-04-40-300: Ø300 mm Vehicle Signal Head with 5 mm LEDs (Black / Sintra Housing) SN-01-40-350: Ø300 mm Single Signal Head with 5 mm LEDs (Black / Standard Housing) SN-04-40-350: : Ø300 mm Single Signal Head with 5 mm LEDs (Black / Sintra Housing) SN-01-40-290: Ø200 mm Vehicle Signal Head with Arrow Figure / 5 mm LEDs (Black / Standard Housing) SN-04-40-201: Ø200 mm Vehicle Signal Head with Arrow Figure / 5 mm LEDs (Black / Sintra Housing) SN-01-40-380: Ø300 mm Vehicle Signal Head with Arrow Figure / 5 mm LEDs (Black / Standard Housing) SN-04-40-301: Ø300 mm 5Vehicle Signal Head with Arrow Figure / 5 mm LEDs (Black / Sintra Housing)









# LED TRAFFIC **COUNTDOWN TIMER**

Diameter Housing Color LED **Power Consumption** Certificates

#### 200 mm / 300 mm Black / Grey-Black 5 mm / Red, Green 15 Watt / Module TS EN 12368:2015

Housing / Mask Material Type Polycarbonate(%100 PC)

#### Ürün Çeşit ve Kodları:

SN-01-05-200: Ø 200 mm Traffic Countdown Timer with LEDs (Black / Standard Housing) SN-04-05-200; Ø 200 mm Traffic Countdown Timer with LEDs (Black / Sintra Housing) SN-01-05-250: Ø 200 mm Animated Pedestrian Signal Head with LEDs (Black / Standard Housing) SN-04-05-250: Ø 200 mm Animated Pedestrian Signal Head with LEDs (Black / Sintra Housing) SN-01-05-300: Ø 300 mm Traffic Countdown Timer with LEDs (Black / Standard Housing) SN-01-05-320: Ø 300 mm Countdown Timer with 2.5 Digits LEDs (Black / Standard Housing) SN-04-05-320: Ø 300 mm Countdown Timer with 2.5 Digits LEDs (Black / Sintra Housing) SN-04-05-300: Ø 300 mm Traffic Countdown Timer with LEDs (Black / Sintra Housing) SN-01-05-325: Ø 300 mm Graphic Countdown Timer with LEDs (Black / Standard Housing) SN-04-05-325: Ø 300 mm Graphic Countdown Timer with LEDs (Black / Sintra Housing) SN-01-05-350: Ø 300 mm Animated Pedestrian Signal Head with LEDs (Black / Standard Housing) SN-04-05-350: Ø 300 mm Animated Pedestrian Signal Head with LEDs (Black / Sintra Housing)





#### 200 MM ANIMATED PEDESTRIAN SIGNAL HEAD WITH TRAFFIC COUNTDOWN TIMER

#### SN-01-05-275



Diameter200 mm / 300 mmWeight6 kg / 9 kgHousing / Mask Material TypePolycarbonate (%100 PC)

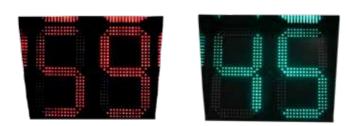
#### 300 MM ANIMATED PEDESTRIAN SIGNAL HEAD WITH TRAFFIC COUNTDOWN TIMER

#### SN-01-05-375



Housing Color LED Power Consumption Black / Grey-Black 5 mm Red, Green 30 Watt

# 800 X 600 MM TRAFFIC COUNTDOWN TIMER SN-01-05-500



#### 400 X 600 MM TRAFFIC COUNTDOWN TIMER SN-01-05-502



Power Consumption

800x600 mm 24 kg

Metal LED 5 mm / Red, Yellow, Green 30 Watt

#### 520 X 470 MM, 2 COLORS GRAPHIC COUNTDOWN TIMER SN-01-05-501



Size Weight Housing / Mask Material Type Housing Color Black

**Power Consumption** 

400x600 mm 15 kg

Metal LED 5 mm / Red, Yellow, Green 17 Watt

#### Size Weight Housing Type Housing Color LED Power Consumption

520x470x100 mm 8 kg Aluminium Black 5 mm / Red, Green 5 Watt



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Dimension Weight Body **Operating Voltage** Intended Use Voice Level Sound Tone Intensity Sound Tone

28x18x13,5cm 1,9 kg %100 PC, Black 220 V Audible warning for blinds Automatic, according to the environment dB level 30-90 dB Warning messages or "Beep" tone

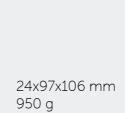
#### **ACOUSTIC AUDIBLE PEDESTRIAN TOUCH BUTTON** SN-07-006

Dimension Weight Body Type **Body Color Operating Voltage** Voice Level Detection

Polycarbonate Yellow – Black 220 V AC

Automatic / Acoustic Characteristic (According to the Environment dB Level) **Touch Sensor** 

#### **ACOUSTICAL SIGNAL TRANSMITTER** FOR PEDESTRIANS SN-07-005





**ACCESSIBLE PEDESTRIAN TOUCH BUTTON** SN-07-008

Dimension Weight Body Type **Body Color** Operating Voltage Voice Level

Detection

120x270x84 mm 2 kg Polycarbonate Yellow – Black 220 V AC Automatic / Acoustic Characteristic (Ac cording to the Environment dB Level) **Touch Sensor** 

#### SİNTRA









### OVERHEAD SIGNAL POLE SN-05-600

Galvanised 139 x 5 mm, 114 x 4 mm, 89 x 4 mm Cylindrical iron pipe TS 301/2, Turkish Directorate of Highways Standards 6 mt

### **STANDARD SIGNAL POLE**

SN-05-001

Protection Pipe Type Standard Height

Galvanised 114 x 4 mm Cylindrical iron pipe TS 301/2, Turkish Directorate of Highways Standards 4 mt





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#### MAESTRO INTERSECTION CONTROLLER

- The Turkish Standards Institute (TSE) approval (TS EN 50556)
- Microcontroller-based modular structure
- Easy programming with the Bluetooth or USB interconnection
- Up to 32 signal groups, 32 and 32 isolated from the loop detector input
- Precision lamp current and voltage controls and secure signaling
- 4, 8, 12, 16, 20, 24, 28 and 32 group opportunities
- Ethernet, GPRS and SMS remote connection options
- 2 separate programming interface for new and experienced users
- All entries for the measurement of compliance with the census and occupancy rate
- External connections for 2 x USB port (PC, GSM, GPS, etc.).
- 16 units 16 units in different phases defined in phase and signal plan
- 48 units 16 units the signal sequence using the steps described in step
- Traffic Adaptive mode of operation for the logical function blocks
- Opening and closing sequences
- In order to avoid the unsafe or defective signalisation traffic signal plans for using the signal outputs to simulate
- The status of normal and fault modes flash, flash colors and frequencies





Product Types and Codes:

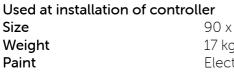
SN-06-01-100: 4 gr Maestro Pedestrian Controller SN-06-01-101: 8 gr Maestro Intersection Controller SN-06-01-102: 12 gr Maestro Intersection Controller SN-06-01-103: 16 gr Maestro Intersection Controller SN-06-01-104: 20 gr Maestro Intersection Controller SN-06-01-105: 24 gr Maestro Intersection Controller SN-06-01-106: 32 gr Maestro Intersection Controller

Product Types and Codes: SN-06-01-150: SSM Module SN-06-01-151: CPU Module SN-06-01-152: MMI Module SN-06-01-153: PSM Module SN-06-01-154: BP Module SN-06-01-155: IO Module 8 Button

#### INTERSECTION CONTROLLER STAND SN-10-001



#### INTERSECTION CONTROLLER STAND (POLE TYPE) SN-10-005



ler 90 x 79 cm 17 kg Electrostatic Paint

# Used at installation of controllerHeight150 cProtectionGalvaWeight24 kg

150 cm Galvanized 24 kg

#### COMPOSITE MANHOLE COVER (COMPOSITE JOINT BOX) SN-10-023

#### MANHOLE COVER SN-10-015



Dimensions Weight Material Type Body Thickness Bending Strength (Mpa) Barcol Hardness (Kj/m<sup>2</sup>) Water Absorption (%) Density (Gr/Cm<sup>3</sup>) Incombustibility Class

40x40x40 cm 20 kg Fiber Reinforced Plastics 10 mm Min. 150 Min 35 Max. 70 mg. Min. 1,5 Bff S 1

Material Type Metal Size Weight Galvanised 40 x 40 cm 7,5 kg



# GREEN WAVE SATELLITE MODULE (GPS) SN-15-010

Synchronization Compatible Device Intended Use GPS Maestro, Master Green Wave System



# FLASHER DEVICE SN-15-020



Operating Voltage Product Type Intended Use 220 V / 12 V In the LED module or on the pole Switch to flash position

# PEDESTRIAN BUTTON SN-07-001



Compatible Pole Compatible Device Intended Use Standard / Overhead Pole All devices which have pedestrian button output. Used when pedestrians want to pass across the road.

# 8 GROUP POLE TYPE PEDESTRIAN CONTROLLER SN-15-041



Size Weight Technical Details Installation 400 x 400 x 200 mm 9 kg 8 group periods, can be adjusted by a computer program. with 2 pcs pole clamps.



# POLE TYPE PEDESTRIAN CONTROLLER SN-15-040



Dimensions Weight Technical Details Installation

400 x 300 x 170 mm 4,50 kg 4 groups, periods can be loaded by computer program with 2 pcs pole clamps