® **BC TECHNOLOGY**

COMMITTED TO PROVIDE INTELLIGENT SOLUTIONS

MATC 4100 TRAFFIC CONTROLLER

Quality Certified Manufacturing

We have been involved in the manufacturing of traffic control systems for more than 35 years with over 4000 traffic controllers operational all over Malaysia and globally. Our MATC 4100 controller combines microprocessor technology with the best quality manufacturing standards.

Functional Features

- ⊘ Fully vehicle actuated (VA) and has a diverse range of programmable timing parameters
- ⊘ Built-in efficient lamp failure and conflict monitoring system
- ⊘ Each output circuit is monitored and configured to trigger amber flashing or shut down upon detection of faults such as green conflict, double lamp, lamp short circuit, red lamp missing or surge protection fuse blown

Key Features

- ⊘ Scalability and Adaptability - Highly modular format and easily scalable with multiple communication options support
- ⊘ Can be connected to PINTAS/ OPTIMES traffic management software via 5G/4G/LTE network
- ⊘ Fail-secure Inter-module communication architecture
- ⊘ Controller digital identification number
- ⊘ Incorporates with Anti Theft Technology

Optional Features

- ⊘ PINTAS or OPTIMES traffic control management system integration
- ⊘ Wireless Detectors and Video Vehicle Detector integration
- ⊘ Digital countdown counters integration
- ⊘ Uninterruptible Power Supply (UPS) and backup batteries
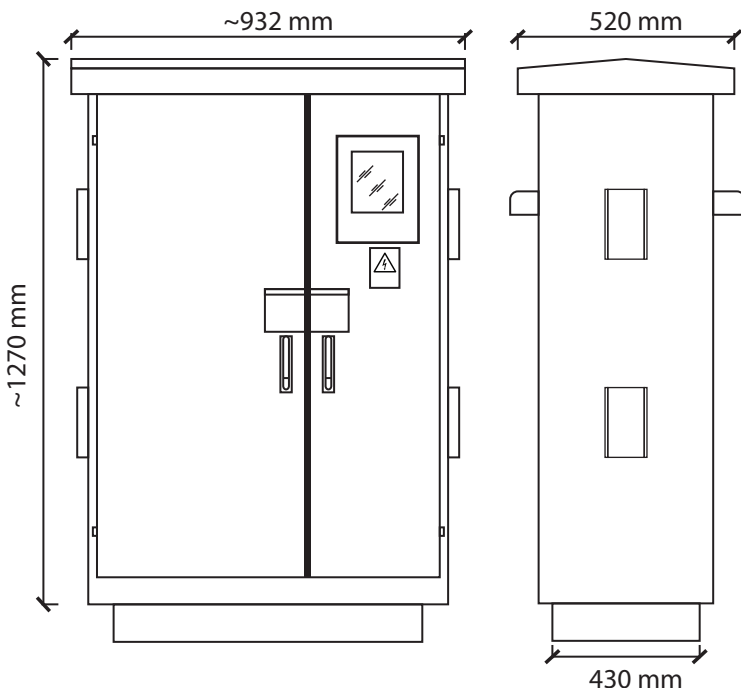
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QUALITY POLICY

It is our commitment to provide the service with the highest standard of safety, quality and reliability that meet the specified requirements and expectations.

BUATAN MALAYSIA PILIHANBIJAK

AJA EQS CERTIFICATION
ISO 9001 : 2015
Cert. No: AJAMY08/1229

STANDARDS MALAYSIA ACCREDITED
No. Akreditasi: ACB QMS 08

M & E Specifications

Constant Power Supply	Front and rear accessible : 4 doors or 2 doors 4 door : 127 cm (H) x 93.2 cm (W) x 52 cm (D) 2 door: 127 cm (H) x 63.5 cm (W) x 52 cm (D)
Cabinet Material	1.5 mm thick epoxy coated oven-baked (grey) stainless steel (ss304), galvanized iron (GI), or electrogalvanized (EG) plate
Access	Push key handle and key
Ventilation	Roof and 4 meshed air vents
Weight	80kg - 110kg depending on signal groups
Main Cards Enclosure	19" front accessible rack
Incoming Voltage and Frequency	230 VAC ± 10% at 50 Hz
Power Consumption	10 W (controller only)
UPS Compatibility	1.2, 2.0, 2.5, 3.0 kVA UPS with 2 maintenance free SLA batteries
Operating Temperature	-10 °C to 75 °C
Humidity Tolerance	Non-condensing
Degree of Protection	IP55 (IEC 60529 Compliant)
Electromagnetic Compatibility	EN 50293 Compliant
Environmental Standard	IEC 60068-2-14; IEC 60068-2-30 Compliant

Operational Specifications

Traffic Management System*	PINTAS/ OPTIMES/ REACT/ TM STAR
Cloud Compatibility	MIOT & 5G/ 4G/ LTE Industrial Cellular modem
Digital Countdown Counter Compatibility*	Provides Non-VA, Semi VA and Full VA data to control countdowns operating in : i) Dash ii) Skip Phase Jump Down
No of Digital Countdown	8 (max)
Countdown Counter Communication	Support wireless or wired
Logging Data and Events	Logs and stores data for any event occuring affecting controller functions
Database back up/ Event Log	Controller log data can be backed up to PPU from flash memory or SD card
Vehicle Priority/ Pre-emption*	Prioritize and preempts green phase for emergency vehicle or police.
Optimizing Processing	Up to 30 min slot
Microprocessor	Advance Processing Unit (APU) containing 32 bit microprocessor chip
Compatibility	Hybrid backward compatible
On board and external memory	8MB with backup battery and provision SD card slot (size depends on client requirements)
Logging Capacity	Fault/ event storage capacity: average 10 events/ day. Data storage capacity : 7 years (max)
PPU Connection Interface	USB/ Bluetooth/ Wifi
Lamp status monitoring	Fuse blown detection, green conflict detection, double lamp detection, lamp failure detection
Lamp conflict or lamp missing	Configurable to trigger amber or traffic system shutdown
LED traffic signal heads compatibility (brand and models)	Must be compatible with Intelligent Lamp Control (ILC 4101) to ensure lamp conflict and missing detection system is functional
Vehicle detection	Using inductive loop sensor or wireless detectors (radar/ infrared/ laser/ video)
Inductive loop sensor	Vehicle detector cards are 12 channels (per card) interface with MATC 4100 Controller. Each rack can accomodate 2 detector cards (24 channel loops)
Communication methods from controller to control centre	LTE/ 4G/ 5G/ Wifi
Communication and SMS Module	PINTAS/ OPTIMES connectivity, fault alert messages to mobile device, MIMIC panel systems and Telegram Messaging
RTC Backup Battery Power Consumption	Last for 10 years
Video Vehicle Countdown Compatibility*	8 (max)

*optional

~932 mm   520 mm   ~1270 mm   430 mm

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