# **STUTTGART<sup>TM</sup>** Advanced Traffic Controller

The Stuttgart<sup> $\mathbb{M}$ </sup> Integrated Traffic Controller is the latest in the Stuttgart<sup> $\mathbb{M}$ </sup> range of controllers with integrated advanced traffic control capability. It hosts a state of the art high-end industrial processor with touch screen LCD that is integrated with on-board detection, conflict monitor, power quality monitoring, cellular and wireless communications.

# COMMUNICATIONS

- o LTE Cellular
- Bluetooth 4.2 + BLE
- o WiFi 802.11 b/g/n
- o Ethernet
- o USB
- o **RS485**

### **KEY FEATURES**

- Wiring-free cabinet
- Open architecture CPU
- Touch screen graphical display
- Open architecture Linux
- $\circ$   $\;$  ATC+ software with UTOPIA support  $\;$
- High resolution logging
- Integrated Radar, Video and Magnetometer detection
- Integrated Conflict Monitor
- Integrated GPS time source
- $\circ$   $\;$  Power quality and consumption meter  $\;$
- Low power for solar installations

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# Adaptive traffic signal control



# **ATC+ SOFTWARE**

# **ATC+Software Engine Features**

#### Control

- 8 flexible vehicle + 4 pedestrian phases
- 4 configurable overlap phases

#### Service Plans

- o 8 service plans
- Selectable by Utopia or TOD
- Independent Phase Flags
  - o Omits
  - Lag, Dual Entry
  - Coordinated, Hold and Walk Rest
  - $\circ$   $\;$  Recalls for Ped, Minimum and Maximum Vehicle
  - Max Inhibit and Full Walk Split

#### Coordination

- o 15 Patterns
- $\circ \quad \text{Max II specified per phase} \\$
- $\circ \quad \mbox{Fixed or floating force offs}$
- $\circ \quad \ \ \, \text{Selectable timing flag sets}$
- Actuated coordinated operation
  Coordinated condition re-service

#### Calendar You Multiple day schedules with a perpetual calendar, every

#### **Detector Assignments**

- 32 Detector inputs from radar, video, magneto or discrete
- Assignable to any phase(s)
- Phases can have multiple detectors

#### **Detector Modes**

- $\circ \quad \text{Locking or non-locking} \\$
- o Call and Extend
- Actuate on falling edge
- $\circ$  Release (force off) a phase on actuation
- **UTOPIA** System Detectors
- Volume Counts
- Fault Detection
- Constant Occupancy
- Minimum Pulse Width
- Erratic Fluctuations
- Absence of Call

#### Preemption inputs

- Six Preempt sequences
  - Two track clearance states, hold state and exit state
  - Selectable permitted phases for each preempt state
- Recovery to coordination

holiday is only programmed once for all years

Any input can be used to call a Preempt sequen

# flexible solutions for **TRAFFIC**



# **ATC HARDWARE**

# FEATURES AND OPTIONS

#### Power and 24 Output Drivers

- 24 VDC
- o 110/230 VAC

#### **Built-in Detection**

- 4 Video channels 8 cameras
- 4 Radar channels 4 3D tracking radars
- Wireless access to 127 magnetometers
- 16 isolated contact closure inputs

#### Conflict monitor

- Built-in flash and redundant module
- USB allowable phase configuration
- CPU/Power phase monitoring
- $\circ$  24 Output voltage & conflict monitoring
- Front LED conflict cause display
- Police panel, external monitor outputs
  User Interface

#### • 7" capacitive touch screen Power Monitoring

- IEC 62053-21-23 accurac
- Power (kVA, kW, kVAr)
- Energy (kWh billable)

# **CPU Specifications**

- 1GHz ARM Cortex A7 processor
- 4GB -64GB eMMC
- 512MB 1024MB DDR3L RAM

### **TECHNICAL SPECIFICATIONS**

Characteristic	Min	Max	Units
Storage Temperature	-40	85	٥C
Operating Temperature	-40	70	٥C
Supply voltage (AC)	85	264	VAC
Supply voltage (DC)	10	30	VDC
Supply power (AC)			Watt
Supply current (DC)			Watt
Drive power per channel		500	Watt
Input Isolation	3000		Volt
Physical size	240x150		mm
Depth	50		mm