

XTE TRAFFIC CONTROLLER

Smarter intersections start here. Distributed or centralised, LTE-connected, and built to keep every phase, stage and stream running safely and reliably, all year round.

NEXT-GENERATION TRAFFIC SIGNAL CONTROL

Our traffic control solution offers all the sophistication required to address the most demanding traffic engineering challenges, while more than complementing the demanding environment in which it must operate.

Fully modular, robust, and above all simple with comprehensive module-status feedback that support staff can read at a glance, empowering them to identify fault conditions fast, without special tools or support devices.



Onboard touchscreen — live module & signal status, no tools required.

BUILT FOR CONTROL ROOMS AND INTERSECTIONS ALIKE

Key Features



Flexible Installations

Deploy as a fully distributed network or a single centralised installation your topology, your choice, configured to match how your network really operates.



Breaker Trip Detection

Instantly detects a tripped mains breaker so faults are flagged early, before they escalate into a full outage on site.



Over-the-Air Updates

Push configuration, software and firmware updates to the field over the air, at scale, keeping every controller current without a site visit.



Access Tracking & Geofencing

Built-in security tracks access and enforces geofenced boundaries around every cabinet, flagging unauthorised entry the moment it happens.



Remote Display Access

View and manage the controller display remotely, without a visiting the site, ideal for fast diagnostics from the control room.



Integrated LTE Comms

Onboard LTE keeps every controller connected to the network, out of the box, for reliable data and remote access from day one.

EVERY OPERATING STRATEGY YOUR NETWORK NEEDS

Modes of Operation

- Fixed Time, Semi/Full Vehicle Actuated & Part-Time Flashing
- UTC, SCOOT, AI adaptive control & full Manual Operation
- Lamps Off, Hurry Call & Emergency Call priority modes
- All Red, Fail-to-Flashing & Manual Flashing safe fallback

32

Stages

8

Independent Streams

32

Phases, Configurable

50

Time-of-Day Plans

TIMING GRADUATIONS

Cycle time	0–255 s, 1 s increments (± 1 s time correction)
Offset	0–255 s in 1 s increments
Min Green/Amber/Red	0–25 s in 0.1 s increments
Vehicle detection	Extension, call, cancel & gap: 0–25 s, 0.1 s incr.
Emergency / Hurry call	0–255 s in 0.1 s increments
Manual timeout	0–60 minutes in 1-minute increments
Start-up flashing	0–25 s in 0.1 s increments

SAFETY MONITORING

Conflict monitoring	Multi-path green conflict check, independently by each XOM
Aspect detection	Detection threshold > 100 VRMS
Conflict response	Fail-to-flash within 400 ms; table checked every 100 ms
Lamp failure detection	Load change > 3 W, unaffected by ageing/supply variation
Drive conformance	Conformance errors detected within 400 ms

ELECTRICAL

Voltage	230 VAC, 80–115% (max. 400 VAC)
Frequency	50 Hz $\pm$ 2 Hz
Mains Interruption	> 50 ms
Transients	6 kV, 1.2/50 μ s
Lamp switching	1 A, 600 V triacs
Power draw	< 25 W

ENVIRONMENTAL

Housing	IP55S — SANS 60259
Bump/Vibration	1000 bumps · 5–33 Hz
Dry heat/Cold	55°C/16h · –10°C/16h
Damp heat	50°C at 95% RH
Solar/Salt fog	+40°C 10d · 1000h fog
MTBF	IEC 60050 / 60300-3-4

CABINET

Height	952 mm
Width	619 mm
Depth	376 mm
Weight	35 kg
Colour	Oyster White
Coating	Anti-corrosion, SABS 1547

Tested to SANS 1547:2022

35+

Years of Service

Two decades engineering technology for governments, municipalities and utilities.



Leaders in Innovation

Bespoke technology solutions built on continuous R&D and field-proven engineering.



Quality & Efficiency

We create technology that moves cities forward — and the people in them.

“Creating technology that moves cities forward.”

Ready to talk XTE Series for your network?

Contact your regional sales engineer to plan a distributed or centralised rollout.

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