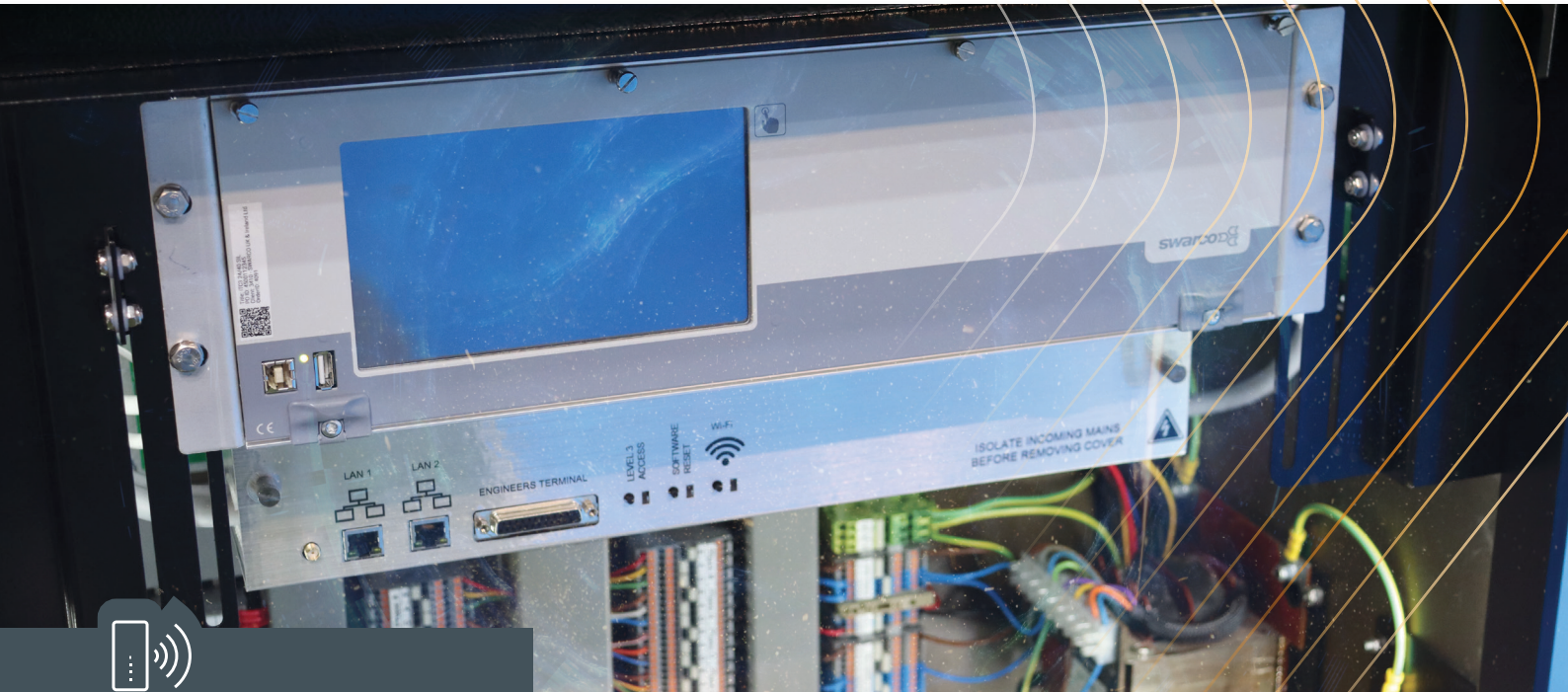


SWARCO

# CHAMELEON<sup>®</sup> MOVA



## INTELLIGENT COMMUNICATION OUTSTATION

Chameleon is a versatile outstation Unit. It can provide an IP interface between a UTC or remote monitoring Instation and almost any traffic light controller. It can also optimise traffic using the latest version of MOVA.

These facilities make Chameleon a cost-effective way of upgrading a controller.

Chameleon has a web-based user interface providing a convenient and intuitive way to monitor, manage and configure the unit.

## CHAMELEON TO CONTROLLER CONNECTIONS

The Chameleon can be connected to a controller by three time-saving connection methods:

①

### WIRED INTERFACE TO THE CONTROLLER INPUT/OUTPUT CARD

Chameleon can be wired to the controller's i/o in accordance with the TOPAS 2523B Traffic Control Equipment Interfacing Specification.

For most applications, up to three digital IO cards can be fitted to the Chameleon, each providing 32 input and 32 output connections. Connected to Chameleon using secure 32 pin plug connections, a 96-bit loom is then connected to the IO card of the host controller enabling direct monitoring of on-street equipment. Adapter kits are available to facilitate the replacement of legacy serial Peek OTU's and Siemens Tele12 OTU's. These kits remove the requirement to re-terminate the existing cable looms, which makes a significant saving in changeover time. For the Peek PTC-1 controller pre-assembled ribbon cables and adaptor PCBs enable Chameleon I/O boards to connect directly to the digital I/O and/or detector outputs.

②

### IFC SERIAL INTERFACE (PEEK TRX SPECIFIC)

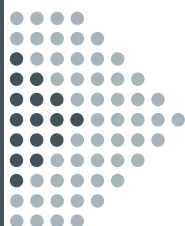
In cases where the host controller is a Peek TRX, the in-situ interface card can be connected via a 9-pin serial cable direct to the Chameleon outstation. This enables the Chameleon to take information directly from the host controller inputs / outputs. Using the serial cable enables installation time to be minimised and provides the benefits of secured plug-in connection points.

③

### CHAMELEON 3RD PARTY INTERFACE (C3PI)

A serial interface enables the Chameleon outstation to obtain detailed fault information data directly from a SWARCO or third-party controller's fault log. This solution removes the need for time-consuming wiring as the wiring loom is replaced by an RS232 lead connected directly to the host controller's central processing unit. This facility is available for use with the Peek PTC-1® family of controllers, the Peek TRX, selected Siemens units (ST800, ST900, ST750), and the Microsense Sentinel controller.

The C3PI can be used in conjunction with the following interfaces for UTC control and monitoring. For remote monitoring the C3PI alone is usually sufficient.





## KEY FEATURES

- UTMC/UG405 Compliant OTU supporting SCOOT
- Third party serial interface available to poll controller fault log
- Remote access to the controller's command line interface from an instation; including the ability to view the controller's fault log
- Remote Monitoring outstation (under UTC and RMS)
- MOVA 8 (2 or 4 Stream)
- Download and upload new plans, timetables and schedules
- Supports up to 96 inputs and 96 outputs
- Multi-site, configurable count facility
- Mode swapping by instation command or timetable
- Real time clock – synchronised from the instation or other NTP server
- Open protocol communications
- Web-based user interface
- Timetables, plans & schedules may be uploaded to the Chameleon to provide local Fixed Time control of connected controllers even when not connected to an in-station

## TECHNICAL DETAILS

<b>Elexon Codes</b>	79 10 016 000 100
<b>Watts</b>	16
<b>Annual kW:Hr</b>	140
<b>CO<sub>2</sub> kg pa</b>	75

## CHAMELEON® MOVA

- MOVA 8 for remote actuated control of up to 4 streams per outstation
- Web-browser interface for efficient monitoring and commissioning
- Configuration files can be created and updated in the web interface with a dedicated entry form or a built-in text editor
- MOVA bit allocations are automatically generated from the MOVA configuration file
- Real time updates of web interface
- Multiple Stream information displayed simultaneously
- Comprehensive configuration uploaded from the SWARCO TMS
- Engineer's Terminal connection provided
- Mode Fallback facility enables the use of a single outstation for MOVA and UTC operation.

## HARDWARE DESCRIPTION

The Chameleon hardware consists of the following core components:

- An uninterruptible power supply (enabling notification of power fail)
- A CPU card running embedded Linux
- Up to three Input/Output cards each supporting up to 32 inputs and 32 outputs
- A 3U high, 19" rack, which can also house other units

## COMMUNICATIONS INTERFACES

The Chameleon can communicate with an instation over a wired or wireless IP communications network, such as DSL, 4G or Wireless Mesh.

## UTMC

Chameleon makes use of the published UTMC MIBs to control and monitor outstation equipment. To achieve this, an MIB object to UTC bit mapping configuration file is used for all control and reply bits. This file can be automatically generated and uploaded from the SWARCO TMS instation. Both UG405 (UM/008) and UTMC-29 (UM/005) MIBs are supported.