

Enhanced monitoring and automation of proving ground test traffic

# GTC™ Pro



Ground Traffic Control™ (GTC) is a centralised platform that provides a powerful and scalable solution for accurate monitoring and coordination of proving ground traffic, including robot-controlled vehicles and ADAS target platforms. GTC is now available in two variants: GTC Core and GTC Pro.

GTC Pro is a combined software-hardware solution designed specifically for managing complex scenarios, offering real-time visibility and control of up to 20 actors on the track. Its server hardware includes several safety features to help reduce risks and operator error including collision detection, geofencing, user permissions, abort stop and custom zoning.

GTC is ideal for managing driverless durability and misuse testing, general proving ground monitoring and management, as well as multi-vehicle highway scenario testing.



**Real-time monitoring of vehicles and other test objects from mobile and permanent base stations**



**Multi-screen support and customisable screen layouts for optimised monitoring**



**GNSS collision detection system monitors vehicle position, heading and speed to automatically avoid collisions**



**Optional Python API enables further customisation**



**Easy set-up of geofenced areas, which can be customised to trigger specific vehicle behaviour within virtual boundaries**



**Ideal for driverless durability and misuse testing and complex multi-vehicle testing**



**Supports multiple users with viewer, operator and manager access levels**



**Compatible with AB Dynamics systems including driving robots, Flex-0™, LaunchPad™ and GST™ products**

# Specifications

## General

Maximum number of concurrent driverless systems connected	20
Products supported	All PowerPMAC based driving robots, Flex-0, LaunchPad and GST products
Types of user licences	Viewer, operator and manager
Concurrent base station users	Up to 12
Recommended installation	Mobile base station vehicle or permanent control tower
Mapping	Microsoft Bing Maps or high resolution proving ground image map
Customisation	/ User definable vehicle colours and icons / Custom screen layouts
Real-time robot information display	/ Map view and vehicle cards / Customisable live robot data / Live inter-vehicle grid
Compatible accessories	/ USB abort button / Logitech driving force racing wheel and floor pedals / Microsoft Xbox controller / Logitech Extreme 3D Pro joystick / Thrustmaster USB joystick

## Real time collision checking

Position based	GNSS system tracks vehicle position, direction, and speed to automatically prevent collisions
Position and path based	Enhanced collision checking taking account of the vehicle's planned path
Zones	/ Limit number of vehicles in an area / Set course specific speed limits / Customise collision checking

## GTC Pro server hardware

Dimensions	187 x 137 x 42 mm
Weight	0.86 kg
Temperature rating	Ambient operating temperature: 0 to +45°C
Power input	12V 2A supply (mains adaptor supplied)



## About AB Dynamics

AB Dynamics is a leading global provider of automotive test and verification solutions that facilitate the development of vehicles that are safer, more efficient and sustainable. As part of the AB Dynamics Group of companies we enable customers to develop and test in virtual environments, validate on the track and then evaluate vehicles on public roads.

For more information:  
[www.abdynamics.com](http://www.abdynamics.com)  
[info@abdynamics.com](mailto:info@abdynamics.com)

### SP12 Issue 3

© 2019-2025 AB Dynamics. All rights reserved. AB Dynamics®, Flex-0™, Ground Traffic Control™, GST™, GTC™ and LaunchPad™ are trademarks and the property of AB Dynamics plc or its subsidiaries in the United Kingdom and elsewhere. Systems, components, methodologies, and software supplied may be the subject of patent and design rights. Whilst this information is provided in good faith, no warranty or representation is given concerning such information, which must not be taken as establishing any contractual or other commitment binding upon AB Dynamics plc or any of its subsidiaries.

