APPLIED TRAFFIC
traffic monitoring solutions

APOLLO FIXED®
Ultra High Accuracy Axle Weighbridge

VWS VEHICLE WEIGHING SOLUTIONS
the bin and vehicle weighing company

Low Speed WIM or Static Axle by Axle Weighing Systems

Integrated High Accuracy Low Speed Weigh-in-Motion System or Static Axle Weighing

Manufactured in Great Britain by VWS APOLLO FIXED® Axle Weighing SYSTEM is a low cost, high spec axle and gross vehicle weigher, either as a static axle weighbridge or for dynamic low speed weighing. The system can be used for check-weighing, for enforcement of vehicle weight limits or overload prevention for transport operators. The electronic weighing controller is encased within a stainless steel enclosure and can either be mounted directly on an office wall, desk or enclosed in a separate cabinet for external mounting. RS232 and RS485 serial connections are available for connecting a weight ticket printer, a computer and/or external large character weight display.

VWS factory and Test Site

High Accuracy
Dynamic or Static Weighing
British Engineering
Easy to Install
Cost Effective

- High accuracy low speed Weigh-in-Motion
- Static Axle-by-Axle weighing
- Toll booth software
- Fully automatic & unmanned operation
- Vehicle classification with automatic comparison to pre-determined axle and gross vehicle weight limits
- Links with VIPER highspeed WIM, pre-selection
- RS485 connection for external networking/RS232/Ethernet
- OIML R60 Class IIII Approval
- 40,000 Kg axle capacity
- 20 mm thick top plate
- Large display and printer option

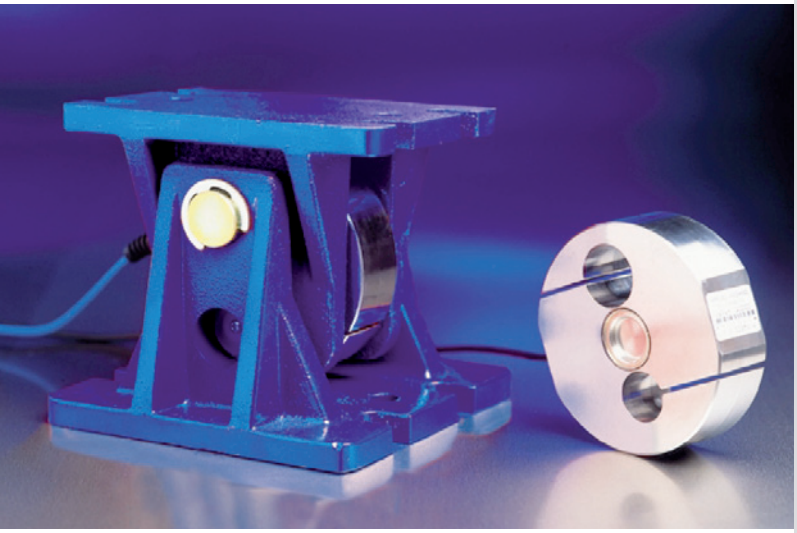
www.vwsltd.co.uk
www.appliedtraffic.co.uk

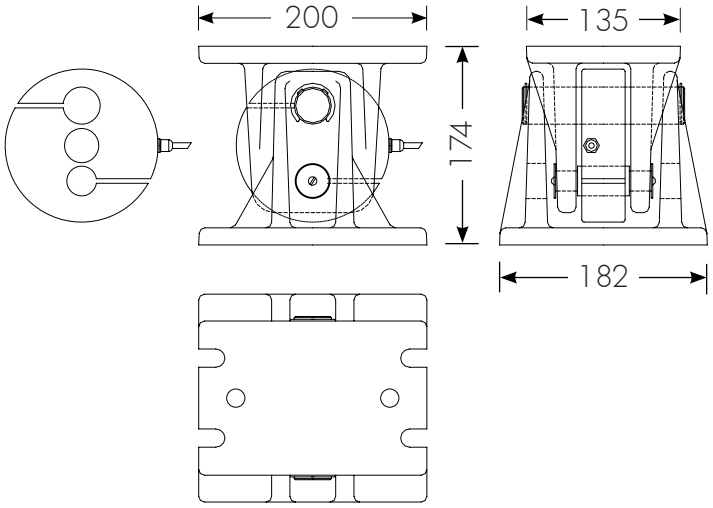
for more information CALL
+44 (0) 118 946 1900

Part of AW www.AW.co.uk
you weigh ○ you measure ○ you control

Weighing Load Cells

APOLLO® incorporates the extremely well proven British built and OIML Class IIII approved TITAN 2 load cells. Sealed to IP68 and manufactured under ISO9001 QA procedures ensures the most accurate and reliable vehicle weighing solution. Over 10,000 supplied and built by Applied Weighing for axle weighbridges.





Consult the Applied Traffic technical team for detailed drawings and installation guidelines.

Weighing Controller

Housed in stainless steel, the weighing controller can be interfaced to any control network or software package. It is ultra-reliable and can interface to our VIPER technology (see VIPER datasheet). Belden-Lumberg screw-on connectors (IP68) are used to simplify the installation - you just screw the connectors together.

- Can be supplied in kit form for self-installations
- Selectable character sizes 6-32 mm weight display
- Large 133x102 mm back-lit LCD touchscreen display
- Navigation and qwerty kyboard (alphanumeric) keys
- 5 soft keys & 10 user-defined functions per screen
- Ten programmable display screens
- Alibi weigh back-up data storage
- Can be delivered pre-calibrated
- IP66 stainless steel enclosure
- Nine slots for option cards
- Local-remote indicators
- Audit trail tracking

AW.co.uk is a family of complimentary British companies made up of Applied Traffic, Applied Weighing International and Vehicle Weighing Solutions (VWS) specialising in the design, manufacuture, installation and service of load cells, weighing systems and traffic monitoring systems.

APOLLO FIXED®

Ultra High Accuracy Axle Weighers

Dimensions:	
Weighbridge deck	3.0 m x 0.73 m x 0.24 m - 20 mm thick top plate
Deck weight	520 kg (total weight 865 kg)
Weighbridge frame	3.25 m x 0.902 m x 0.35 m
Frame weight	345 kg
Load cells	4 x 10,000 kg 'Titan' heavy duty stainless steel fully welded OIML ATEX manufactured by Applied Weighing - 5 year warranty
Load cell assemblies	The unique tension assembly has been used in axle weighbridges for over 20 years
Assembly material	Cast iron powder coated
Load cell pins	Stainless steel
Operating temperature	-10^{0}C to $+40^{0}$C humidity 90% non-condensing (maximum)
Overload rating	150%
Instrument	Stainless steel enclosure Weight display - 40mm bright LCD - backlight Touch screen Display - 133mm wide x 102mm high 640 x 480 pixel matrix colour backlite display IP 66 - enclosure Keypad - 52 alpha-numeric Internal 64mb user memory Over speed display Display showing weights against permitted weights with overloads shown Real clock date and time Internal database of - Permitted weights by vehicle type or classification - full alpha-numeric descriptions - Vehicle ID's or registrations with predictive entry Outputs - 1 x bi-directional RS-232 Port 1 x bi-directional RS-232/20mA port 1 x bi-directional RS-232/RSa85 port 1 x each DeviceNel/ICAN Port 4 x each isolated inputs and 4 each isolated output ports 1 x each 1OI1OO Base-T Ethernet port (TCP/IP or EIP) 2 x USB A host port 1 x USB B device port
Junction box	Stainless steel IP68
Operating speed	0 - 9 km/h for fleet operators 0 - 5 km/h for trade and law enforcement applications
Accuracy	Factory deadweigh tested to 20,000 kgs, ideal strength 40,000kgs ±5 kgs to 5,000 kgs end to end ±10 kgs to 20,000 kgs Supplied with a factory test certificate of accuracy, traceable to national standards Enforcement and trade: On installation ±0.5%. In service ±1%
Power	110v/240v single phase

The APOLLO FIXED® axle weighbridge is supplied with a controller for unmanned or manned toll booth applications.

We can interface with automatic number plate recognition (ANPR) systems or for enforcement preselection VIPER low speed weigh-in-motion (LSWIM) or high speed WIM with a vehicle classifier. For example, you install VIPER WIM on the fast flowing highway, an overweight vehicle is detected, a photograph is taken and an APNR search carried out for the overweight vehicle, a message is displayed on an overhead variable display or sent to the enforcement officer. The overweight vehicle is then pulled over and weighed on an approved APOLLO weighing platform. Action taken ranges from fines, license endorsements, prohibition notices, suspension or removal of operators licenses.

Previously when used by VOSA in the UK, a 700% increase in overweight axle detection was achieved.

Apollo Toll

We can supply installation & fabrication drawings of the Apollo Deck and supply loadcells, mount pins and the Apollo Toll-in-Motion axle weighing system. This can help give you manned or unmanned virtual weighbridge system anywhere in the world. You can see the exact number and class and the exact size of any weight overloaded on your highway.
For increased reliability we can fit the AWI intelligent junction box which monitors the performance of the Loadcells 24-7.

Toll booth and Apollo fixed axle weighebridge

Large overhead Display

Typical Characteristics

Character height:	102 mm (4 inches)
Number of digits:	4 to 8
Backlight:	Yes, yellow (only -BL variants)
Floating decimal:	Yes
Interface:	Serial RS-232 (isolated), RS-485 20 mA isolated current loop
Connection:	Cable 4m
Housing:	Stainless steel, including mounting bracket
Weather protection:	IP-65
Programming:	Auto-detect, Terminal or free Windows 95/98 program, or by IR Remote Control (optional)

HQ: Vehicle Weighing Solutions Limited
Southview Park, Marsack Street,
Caversham, READING RG4 5AF
T: 0118 946 1900
F: 0118 946 1862
For Global partners contact HQ

sales@vwsltd.co.uk
www.vwsltd.co.uk
+44 (0) 118 946 1900

12 Mar 14