

enviro multisensor

A portable, battery powered instrument to simultaneously monitor the concentration of up to five different gases together with levels of ambient temperature and ventilation air velocity.

- Any monitoring combination of toxic or flammable gases can be user-configured.
- Advanced technology sensing techniques:
 - INFRA RED
 - ELECTROCHEMICAL
 - CATALYTIC COMBUSTION
- Powerful processing capability for intelligent characterisation of sensor response. Exceptional accuracy over a wide variation of temperature and atmospheric pressure conditions.
- High definition, full graphical display, combined with the Trolex KEYGUIDE user interface system, makes for remarkably simple operation – all controlled from the four way NAVIGATOR keypad.
- Two thousand point data logging and trend display for each sensor.
- Heavy duty applications, dust and waterproof to IP66 protection standards.
- Certified intrinsically safe for use in both Group I and Group II hazardous areas.
- Safety protection in confined spaces;
 - Tunnels • mining • trenches • telecommunications
 - distribution systems • vessels • containers.
- Area protection;
 - Chemical processing plants • offshore platforms
 - storage areas • warehousing • waste water treatment
 - semiconductor manufacture • bottling plants
 - materials handling plants • landfill monitoring
 - marine applications.



TX6522



Navigator Keypad



Smart Sensing

TX6520 plug-in, pre-calibrated, intelligent, gas sensing modules.

Each module carries in-built data about its identity, gas concentration range and units of measurement.

This data is used to automatically configure the appropriate monitoring channel of the instrument in whichever position it is fitted.



INFRA RED GAS SENSOR



CO ₂	Carbon Dioxide:	0...2% vol.	(.253)
-----------------	-----------------	-------------	--------

ELECTRO CHEMICAL GAS SENSORS





CO	Carbon Monoxide:	0...50ppm. 0...500ppm.	(.250)
H ₂ S	Hydrogen Sulphide:	0...100ppm.	(.251)
SO ₂	Sulphur Dioxide:	0...20ppm.	(.252)
NO ₂	Nitrogen Dioxide:	0...20ppm.	(.254)
Cl ₂	Chlorine:	0...10ppm.	(.255)
O ₂	Oxygen:	0...25%.	(.257)
NO	Nitric Oxide:	0...200ppm.	(.259)
H ₂	Hydrogen:	0...1000ppm.	(.261)
CO	Carbon Monoxide:	DUAL 0...500ppm. 0...100ppm.	(.269)
H ₂ S	Hydrogen Sulphide:		

CATALYTIC COMBUSTION GAS SENSOR



Flammable Gases:	0...5%v/v. Grp I	(.01.240)
	0...100% LEL. Grp II	(.02.240)
Calibrated to CH ₄ (Methane) with menu selection of 12 conversion factors for alternative flammable gases.		

ENVIRONMENTAL SENSORS

Ambient Air Temperature Sensor:	-10...+50°C.	
Auxiliary Sensor Input Port:	Remote connected air velocity sensor. 0.5...30m/sec or volumetric averaging.	

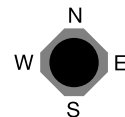
A comprehensive range of other gas sensing modules is available. Please contact our Sales Department for details.

Smart Housing

- Dust and waterproof to IP66 (Gas Inlet IP54).
- High strength moulded polycarbonate with stainless steel reinforcement.
- Antistatic and EMC compatible.
- Convenient clip-on carrying strap.
- Replaceable battery pack.
- All-round visual alarm.

Smart Display with User KEYGUIDE

- Full graphic display panel with rear illumination and Trolox KEYGUIDE user interface system.



Smart Safety

- Microprocessor controlled operating system with 12 bit A/D signal conversion.
- In-built compensation sensors for ambient temperature and atmospheric pressure with remote connection facility for air velocity sensor.
- Dual alarm set points for each sensor with high brightness area-warning flashing alarm. Periodic audio/visual confidence marker and instrument status alarms.
- Two thousand points of data logging per sensor with alarm event report, can be downloaded into PC.





EARPIECE



AUXILIARY CONNECTOR



NAVIGATOR KEYPAD



CARRYING STRAP WITH SNAP-IN CLIPS

Interchangeable Battery

RECHARGEABLE BATTERY PACK (.51)

- Clip-on rechargeable NiMH battery.
- Can be interchanged in the hazardous area.
- Up to 48 hours operating time.



RECHARGEABLE BATTERY PACK WITH ELECTRIC GAS INFUSION PUMP (.52)

- Boreholes, landfill sites, vessels, trenches, ducts and cavities.



BATTERY CHARGER

Drop-in battery charger with automatic battery protection.

Simultaneous battery-pack trickle charging.



- 2 hour rapid charge version or 8 hour standard charge.
- Charging status indicating LED.
- Temperature controlled, automatic charging.
- 110V and 240V ac supply with UK, EU, or North America mains power connecting lead.

Aftercare

We recognise that efficient AFTERCARE is an essential part of safe instrument management so convenient servicing considerations are an integral part of the instrument design.

We provide service contracts that are specifically structured to encompass complete after-care responsibility of the instrument, ensuring confidence in its use and operational security.

Please contact our Sales Department.



Trouble Free Servicing



Our 24 hour turnaround and calibration service for gas sensing modules simplifies periodic instrument care.



Technical Details

Protection Class:	Housing: IP66. Gas Inlets: IP54.
Relative Humidity:	0...90% non-condensing.
Pressure:	700...1300mbar.
Housing Material:	Polycarbonate (Antistatic).
Weight:	850 gms.
Operating System:	Microprocessor: 12 bit A/D conversion.
Power Supply:	Re-chargeable, clip-on NiMH battery pack (can be replaced in a hazardous area).
Battery Power Time:	48 hours approx. (4 Electro chemical sensors). 24 hours approx. (3 Electro chemical sensors, 1 Catalytic Combustion sensor).
Battery Charge Time:	Rapid Charger: 2 hours max. Standard Charge: 8 hours max.
Alarm Indicators:	<ul style="list-style-type: none"> • Confidence flash and audible tone. • High brightness, flashing alarm and audible alarm. • Low battery alarm. • Sensor fail alarm (infra-red). • Calibration indicators. • STEL/TWA.
Audible Alarm:	<ul style="list-style-type: none"> • High intensity audible sounder: 95db at 1m. • Optional earpiece.
Dimensions:	Height 170mm x Width 100mm x Depth 50mm.
Gas Infusion:	<ul style="list-style-type: none"> • Natural diffusion. • Hand operated infusion pump. • Electrically operated, diaphragm infusion pump: 1.2 l/min typical.
Display:	<p>32 x 122 pixels, Graphic LCD with backlight</p> <ul style="list-style-type: none"> • Trolex KEYGUIDE user interface system. • Battery contents gauge. • FIRST LEVEL and SECOND LEVEL alarm indicators. • Gas sensing module CALIBRATION indicator. • ANNUAL SAFETY CHECK due indicator. • Common GAS PRESENT indication. • Simultaneous bargraph readings of all sensor signals. • Individual reading of any sensor signal. • PEAK and LOW data retention. • Graphic TREND display of individual sensor values. • Scrolling display of logged data.
Programming:	<p>Four way NAVIGATOR Keypad with Trolex KEYGUIDE User Interface</p> <ul style="list-style-type: none"> • Display contrast adjustment. • Log entry and position identification. • Pump control: On/Off/Cycle. • Keycode security barrier. • Selection of twelve LEL conversion factors. • LEL or VOLUME measurement selection. • Two level setpoint alarms. • RISING or FALLING alarm function. • 24 hour clock and calendar. • Zero in clean air.
Data Logging:	<ul style="list-style-type: none"> • Choice of manual or automatic logging. • 2000 readings per sensor with alarm event report. • Download facility to PC.

Approvals and Certification

	<ul style="list-style-type: none"> • Certified IS to Euronorm Standards: 	EEx iad IIC T4, II2G Sira 99 ATEX 2065 EEx ia I, IM1 Sira 99 ATEX 2065
	<ul style="list-style-type: none"> • Performance approved to Euronorm Standards: 	EN50054 EN50055 EN50057
	<ul style="list-style-type: none"> • Designed to comply with: 	ATEX directive (94/9/EEC) EMC directive (89/336/EEC)

Order Reference

TX6522
ENVIRO MULTISENSOR.
including

- Ambient Air Temperature Sensor.
- Auxiliary Sensor Input Port.


Please specify:

- Type of TX6520 Gas Sensing Modules required.
- Type of Battery Pack required.
- Intrinsically Safe Group I. (01)
- Intrinsically Safe Group II. (02)

Please order Battery Charger, Vortex Air Flow Sensor and Accessories, separately.

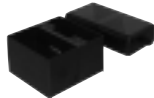
- Special version available for Automatic Fire Damp detection (AFD) in mining applications.

TX6522.911
ENVIRO MULTISENSOR.

Accessories

TX6520.07
RAPID BATTERY CHARGER.

Charge slot for the complete instrument and charge slot for an independent battery pack.


Please specify:

- UK. (90...264V ac universal supply) (11)
- EU. (90...264V ac universal supply) (12)
- Flying Lead. (90...264V ac universal supply) (13)
- NA. (90...264V ac universal supply) (14)

TX6520.25
CARRYING CASE.

Protective leather case for convenient carrying and storage.


TX6520.24
PROTECTIVE CASE.

High resilience moulded case for maximum impact protection.


TX6520.53
SUSPENSION HOOK.

Fits onto the carrying strap.


TX6520.43
HAND INFUSION PUMP.

With connecting tubes and two gas port plugs.


TX6520.42
REACH TUBE.

1m long for use with Hand Infusion Pump version or Electric Infusion Pump version.


TX6520.22
EARPIECE WITH STORAGE POUCH.

For use with ear defenders in noisy environments.


TX6520.23
DATA CABLE AND DOWNLOAD SOFTWARE.

For downloading logged data complete with Windows 95 software package.


TX5924
VORTEX AIR FLOW SENSOR.

With 2m connecting cable and connector for remote air velocity sensing.


TX6520.51
REPLACEMENT BATTERY PACK.

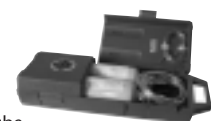
With NiMH rechargeable cells.


TX6520.52
REPLACEMENT BATTERY PACK/PUMP.

With NiMH rechargeable cells and electric infusion pump system.


TX6520.32
GAS TEST KIT.

Complete with purge air canister, test gas application tube with bayonet fitting, exit tube with bayonet fitting, two gas port plugs. Storage case.


Please specify type of test gas.
TROLEX LIMITED

Newby Road, Hazel Grove, Stockport, Cheshire SK7 5DY, UK. Tel: +44 (0)161-483 1435 E-mail: sales@trolex.com Website: www.trolex.com

The above data is given for guidance only. It does not constitute a specification or an offer of sale. The products are always subject to a programme of improvement and testing which may result in some changes in the characteristics quoted.