

# Oil Water Interface Meter (Handheld and Standard)

## Operating Manual



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# Oil Water Interface Meter

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## 1. Instructions specific to hazardous area installations

(Reference European ATEX Directive 94/9/EC, Annex II, 1.0.6.)

The following instructions apply to equipment covered by certificate numbers Sira 04ATEX2366:

The equipment may be located where flammable gases and vapours of group IIB may be present. The equipment is only certified for use in ambient temperatures in the range -20°C to +40°C and should not be used outside this range.

The equipment has not been assessed as a safety-related device (as referred to by Directive 94/9/EC Annex II, clause 1.5).

Installation of this equipment shall be carried out by suitably trained personnel in accordance with the applicable code of practice (EN 60079-14 within Europe).

Repair of this equipment shall be carried out by the manufacturer or in accordance with the applicable code of practice (IEC 60079-19).

If the equipment is likely to come into contact with aggressive substances, then it is the responsibility of the user to take suitable precautions that prevent it from being adversely affected, thus ensuring that the type of protection is not compromised.

Aggressive substances - e.g. acidic liquids or gases that may attack metals, or solvents that may affect polymeric materials

Suitable precautions - e.g. regular checks as part of routine inspections or establishing from the material's data sheet that it is resistant to specific chemicals

**The Oil/Water Interface Meter has been certified to Hazardous Area Classification**

 **II 1G Ex ia IIB T4 Ga**

<b>Caution</b>	<p><b>Only</b> use Duracell battery MN1604.</p> <p><b>Only</b> change battery in safe area.</p> <p>This product must be grounded before introduction into a tank, well, etc, and remain grounded until complete withdrawal.</p> <p><b>Only</b> clean with a damp cloth when removing tape/probe from a tank, well, etc.</p> <p>The meter may be used outdoors. However, it should not be used in positions where it may be subjected to long periods of inclement weather without further protection.</p>
<b>General Operation</b>	<p>This product does not have an auto-power off facility. It must be switched <b>ON</b> and <b>OFF</b>.</p> <p>In standby mode the battery will last for approximately 36 hours.</p> <p>Any maintenance should <b>only</b> be carried out in safe area.</p>

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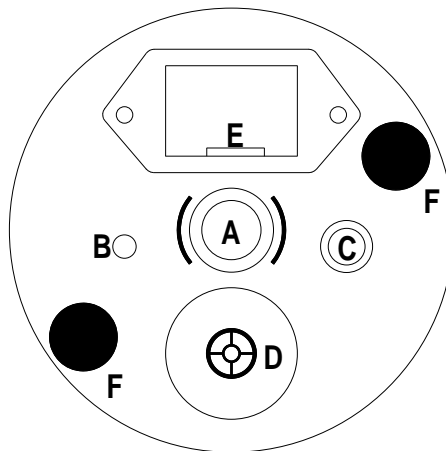
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## 2. Quick Start Instructions

The Interface Meter is very simple to operate. These instructions detail the basic operating procedures:

**Caution:** This product must be grounded before introduction into a tank, well, etc., and remain grounded until complete withdrawal.

1. Turn on the Interface Meter by pressing button (A) in the centre of the reel. The Battery light will illuminate (B); this will stay on until the unit is switched off.
2. When the probe is lowered into Hydrocarbon product the Oil/Water light (C) and beeper (D) will be on continuously. A reading should be taken from the measuring tape to a fixed reference point.
3. Lower the probe further into the well until the water signal is given. Then carefully raise the probe until the product(oil) signal is given (light (C) will flash and beeper will sound intermittently). Note the reading.
4. Deducting the first distance measured from the second will define the thickness of the product.



- A - ON/OFF switch
- B - Battery light
- C - Oil/Water light
- D - Beeper
- E - Battery Compartment
- F - Disk retaining fixings

To ensure the Interface Meter provides reliable and long term service, follow these general guidelines:

- Avoid sharp edged borehole casing.
- Avoid entanglement with other equipment in boreholes and wells.
- Do not use the unit as a guide for backfilling boreholes with sand etc. - the probe and tape may get locked into the backfill.
- Always clean and dry the probe after use.
- Always rewind the tape onto the reel after use.

## 3. Introduction

The Interface Meter is used to determine the thickness of floating product above the water table. It can also detect and measure sinking layers of DNAPLs.

The Interface Meter is designed and built by experienced field engineers and hydrogeologists who recognise and respond to the needs of the environmental monitoring market. The unit is extremely simple to use – the probe is lowered down a borehole or well casing and on contact with product a single tone and a steady light are triggered at the reel. When the probe reaches water, the tone becomes intermittent and the light flashes. By carefully recording the length of tape (from a fixed reference) to reach these two points, the product thickness can be calculated.

The Interface Meter incorporates a number of features to ensure reliable and efficient measurement of the oil/water interface.

The tape reel is of metal construction with stainless steel fittings. A unique hook on the frame allows the meter to hang on a borehole casing - useful during recovery and draw-down testing.

Electronics are fully encapsulated to protect against water and mechanical damage, ensuring a long and trouble-free life. The electronic module is easily removed allowing de-contamination of the unit. The meter is powered by one 9 volt battery located in the reel module, easily removed without dismantling the reel.

Quality engineered tapes are resin-jacketed high tensile steel for strength and incorporate two durable stainless steel conductors. Tapes are available marked in metric and imperial units and the standard length is 30m - with longer version units made to order.

The stainless steel probe is ultra-slim - only 15mm in diameter. It is designed to be used in a wide range of well diameters down to 19mm. The probe/tape joint is a unique Viton and steel link which prevents excessive stress at this point.

The unit is supplied complete with the following accessories:

- Carrying Bag
- Cleaning Kit
- Instruction manual

# Oil Water Interface Meter

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## 4. Maintenance

### 4.1 General

If the reel and frame need cleaning with water always remove the electronics module in the reel first by undoing the fixings (F) and sliding out the entire module. NOTE – only clean with as instructed below.

The battery is accessed by opening the compartment lid (E). NOTE – the operator should always ensure the correct battery type is fitted at all times, refer 'important notes' section at the beginning of this manual.

### 4.2 Care of Reel

If the reel and frame need cleaning with water and always remove the electronic front panel before washing. The reel may be cleaned with these solutions:

<i>Aliphatics:</i>	Hexane Heptane White Kerosene
<i>Alcohols:</i>	Methyl Isopropyl Isobutyl
<i>Halogenated Hydrocarbons:</i>	Freons TF Freons TE
<i>Others:</i>	Soap solution with Naptha Alconox 10% Most commercially available detergent based cleaning solutions

### 4.3 Care of Tape and Probe

The tape and probe can be cleaned and de-greased with the following:

<i>Alcohols:</i>	Methyl Isopropyl Isobutyl
<i>Aliphatics:</i>	Hexane Heptane
<i>Halogenated Hydrocarbons:</i>	Fully Halogenated Freon
<i>Others:</i>	Soap solution with Naptha Alconox 10%

*Note:* Do not clean the tape or probe with abrasives

The probe lens is made from Amorphous Thermoplastic, highly resistant to many chemicals, but contact should be avoided with:

- Chloroform 1.1.2 Trichloroethane
- Partially Halogenated Hydrocarbons such as Methylene Chloride, Ketones such as M.E.K. Phenol (saturated solution).

## 5. How To Use The Unit

### 5.1 How the unit works

The probe contains an infra-red emitter and an infra-red detector. When the unit is switched on in air, the infra-red emitter sends out an infra-red beam inside a 45 degree prism. The infra-red beam reflects off the internal face of the prism to the opposite face, which then reflects the beam to the detector. In this state the unit is silent.

When the probe is lowered into fluids which are denser than air, the SNELL principle operates. The infra-red beam is not reflected internally, but exits the prism and the detector does not receive the infra-red beam. In this state the unit emits a continuous tone and the red light is on.

At the same time the two conductivity probes are testing for conductivity. If the fluid does not conduct electricity, the sound tone and light are solid - meaning the probe tip is in product. If the fluid does conduct electricity, the tone is intermittent - meaning the probe is in water.

### 5.2 Taking Measurements

When taking measurements it is important the lens is cleaned prior to use. This will eliminate any spurious readings from a contaminated lens.

The probe should be lowered down the borehole in a controlled manner and not dipped in with the brake off. If the probe is dropped down a borehole damage to the probe could occur if it sticks the base of the well.

- First lower the probe into the well and note the depth of the top of the liquid (oil).
- Next lower the probe further into the well until the water signal is given.
- Now carefully raise the probe until the product (oil) signal is heard.
- Note this depth. This is the depth of the underside of the oil layer. You now have depth to product and depth to the interface of product and water.

# Oil Water Interface Meter

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## 6. Trouble Shooting

Problem	Solution
Unit doesn't work when switched on.	Check the battery, green light off, replace battery.
The unit does not work with new battery.	Probe could be near infra-red light, test unit away from infra-red or incandescent light.
Unit does not work in normal light.	Check polarity and connection of removable electronic panel. Check for broken or loose wires, or dirt or corrosion on the contact strips on the back of the panel. If they are dirty, clean them.
Unit sounds continuously when probe enters well - even if not in product.	Check the lens is clean - unit is silent in daylight. Check the lens is not excessively scratched - if scratched, polish with a soft cloth and mildly abrasive cleaner to restore a smooth finish to the lens.
The unit emits the intermittent signal when the probe tip is in water – but changes to continuous signal when probe body contacts the water.	Check the ground wire is not shorting out on the signal wires (black and brown) in the hub.
It is difficult to detect the Interface when there is a heavy product.	Apply a small amount of detergent to the probe body and tip. Lower the probe into the well and find the top of the product. Lower the probe into the water then slowly draw up the probe to find the underside of the product layer.
A steady tone is emitted at the surface of the water in the well - when the well is known to have no product.	Lower then probe slowly down the well to enable the probe to enter the water slowly. It is recommended that a reading is taken as the probe passes down through the water - rather than when it is reeled in up through the water.
The unit emits a signal when the probe is removed from the well but not in any fluid.	Small amounts of fluid may be draining down the probe over the lens and causing sporadic signals.
The unit emits a continuous signal when measuring the water level in a cascading well.	The unit is not designed for cascading well use, as water running over the lens can cause the unit to signal “product”.

## 7. EC Declaration Of Conformity

<b>PRODUCTS</b>	<b>IM1.1-20</b>	Portable oil/water interface meter
	<b>IM1.1-30</b>	Portable oil/water interface meter
	<b>IM1.1-60</b>	Portable oil/water interface meter
	<b>IM1.1-100</b>	Portable oil/water interface meter

Geotechnical Instruments (UK) Ltd. declare that the item(s) described above are in compliance with the following standards:

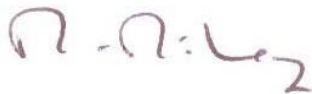
### ATEX Directive 94/9/EC

Certification body: SIRA Certification Service  
Notified body number: 0518  
Address: Rake Lane, Eccleston, Chester, CH4 9JN  
Certificate number: Sira 04ATEX2366  
Standards applied: EN 60079-0:2006  
EN 60079-11:2007  
EN 60079-26:2007

### EMC Directive 89/336/EEC

Standards applied: EN50081-1:1994 Radiated Emissions  
EN50082-1:1992 Radiated Susceptibility  
EN50082-1:1992 E.S.D.  
EN50082-1:1992 Bulk Current Injection

Signed:



Dr. Roger Riley

**NPI Manager & Authorised Person**

Geotechnical Instruments (UK) Ltd

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## 8. Instructions relatives à l'installation en zone dangereuse

(Référence : Directive européenne ATEX 94/9/CE, Annexe II, 1.0.6.)

Les instructions qui suivent se rapportent aux équipements portant le numéro de certificat Sira 04ATEX2366 :

Cet appareil peut être situé dans des zones présentant des gaz et des vapeurs inflammables de catégorie IIB. Cet appareil n'est certifié que pour l'utilisation à une température ambiante comprise entre -20 et +40 °C et ne doit pas être utilisé hors de cette plage spécifique.

Cet appareil n'a pas été testé en tant que système lié à la sécurité (voir Directive 94/9/EC, Annexe II, clause 1.5).

L'installation de cet appareil doit être effectuée par un personnel dûment formé, conformément au code de pratique applicable (en Europe, EN 60079-14).

La réparation de cet appareil doit être effectuée par le fabricant ou conformément au code de pratique applicable (IEC 60079-19).

Si l'appareil doit entrer en contact avec des substances agressives, il incombe à l'utilisateur de prendre toutes les précautions qui s'imposent, pour prévenir tout endommagement de l'appareil et assurer sa protection.

Substances agressives - Liquides ou gaz acides capables d'attaquer les métaux, ou solvants affectant les polymères

Précautions appropriées - Effectuer, par exemple, des vérifications régulières dans le cadre d'inspections de routine ou établir, à l'aide de la fiche technique du matériau, qu'il résiste à certains produits chimiques spécifiques

**Ce compteur d'interface huile/eau a été certifié pour l'utilisation en zone dangereuse**

 **II 1G Ex ia IIB T4 Ga**

<b>Attention</b>	Utiliser <b>exclusivement</b> des piles Duracell MN1604. Changer les piles <b>exclusivement</b> dans un endroit sûr. Cet appareil doit être relié à la terre avant toute introduction dans un réservoir, dans un puits ou tout autre endroit ; il doit également rester connecté à la terre jusqu'à retrait complet. Nettoyer <b>exclusivement</b> avec un chiffon humide après retrait du réservoir, puits ou autre endroit. Ce compteur peut être utilisé à l'extérieur. Il ne doit toutefois pas être utilisé dans des endroits où il risque d'être exposé à de longues périodes d'intempéries sans protection supplémentaire.
<b>Fonctionnement général</b>	Cet appareil ne comporte aucun système d'arrêt automatique. Il doit être <b>allumé</b> et <b>éteint</b> manuellement. En mode de veille, la pile présente une autonomie d'environ 36 heures. Tout entretien doit être effectué <b>exclusivement</b> dans un endroit parfaitement sûr.

### 8.1 Maintenance

### 8.2 Généralités

# Oil Water Interface Meter

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Si la bobine et le cadre doivent être nettoyés à l'eau, toujours retirer le module électronique de la bobine en premier lieu. Pour ce faire, déposer les fixations (F) et faire coulisser le module tout entier hors de l'unité. REMARQUE : nettoyer uniquement selon les instructions ci-dessous.

L'accès à la pile se fait en ouvrant le compartiment (E). REMARQUE : l'opérateur doit s'assurer à tout moment que le type correct de pile est installé dans l'appareil. Consulter la section des remarques importantes au début de ce manuel, pour de plus amples informations.

## 8.3 Entretien de la bobine

Si la bobine et le cadre doivent être nettoyés à l'eau, toujours retirer le module électronique de la bobine en premier lieu. La bobine peut être nettoyée à l'aide des solutions suivantes :

<i>Aliphatiques :</i>	Hexane Heptane Kérosène blanc
<i>Alcools :</i>	Méthyle Isopropyle Isobutyle
<i>Halons :</i>	Fréon TF Fréon TE
<i>Autres :</i>	Solution savonneuse à 10 % de Naptha Alconox Plupart des solutions de nettoyage à base de détergents, disponibles en magasin

## 8.4 Entretien de la bande et de la sonde

La bande et la sonde peuvent être nettoyées et décapées à l'aide des produits suivants :

<i>Alcools :</i>	Méthyle Isopropyle Isobutyle
<i>Aliphatiques :</i>	Hexane Heptane
<i>Halons :</i>	Halofréon
<i>Autres :</i>	Solution savonneuse à 10 % de Naptha Alconox

*Remarque :* ne pas nettoyer la bande ni la sonde à l'aide d'abrasifs

La lentille de la sonde est fabriquée en thermoplastique amorphe à haute résistance à la plupart des produits chimiques, mais il convient toutefois d'éviter tout contact avec les produits suivants :

- Trichlorométhane 1.1.2
- Halons partiels tels que le chlorure de méthylène et les cétones telles que le phénol M.E.K. (solution saturée).

## 8.5 Déclaration de conformité CE

<b>PRODUITS</b>	<b>IM1.1-20</b>	Compteur portable d'interface huile/eau
	<b>IM1.1-30</b>	Compteur portable d'interface huile/eau
	<b>IM1.1-60</b>	Compteur portable d'interface huile/eau
	<b>IM1.1-100</b>	Compteur portable d'interface huile/eau

Geotechnical Instruments (UK) Ltd. déclare que le ou les appareils décrits ci-dessus sont conformes aux normes suivantes :

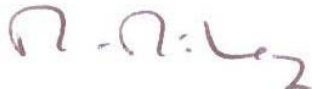
### Directive ATEX 94/9/CE

Organisme de certification : SIRA, Service de certification  
Référence de l'organisme : 0518  
Adresse : Rake Lane, Eccleston, Chester, CH4 9JN, Royaume-Uni  
Numéro de certificat : Sira 04ATEX2366  
Normes appliquées : EN 60079-0:2006  
EN 60079-11:2007  
EN 60079-26:2007

### Directive EMC 89/336/EEC

Normes appliquées : EN50081-1:1994 sur les radiations  
EN50082-1:1992 susceptibilité de rayonnement  
EN50082-1:1992 E.S.D.  
EN50082-1:1992 sur l'injection directe de courant

Signature :



Dr Roger Riley

**Directeur de la Division de lancement des  
nouveaux produits et personne autorisée**

Geotechnical Instruments (UK) Ltd

## 9. Anweisungen für Installationen in Gefahrenbereichen

(Referenz: Europäische ATEX-Richtlinie 94/9/EG, Anhang II, 1.0.6)

Die folgenden Anweisungen gelten für Geräte, die durch die Zertifikatsnummern Sira04ATEX2366 abgedeckt sind:

Das Gerät kann an Einsatzorten untergebracht werden, an denen Gase und Dämpfe der Gruppe IIB vorhanden sein können. Das Gerät ist nur zertifiziert für den Einsatz bei Umgebungstemperaturen im Bereich von -20 °C bis +40 °C und sollte außerhalb dieses Bereichs nicht eingesetzt werden.

Das Gerät ist nicht als Sicherheitsvorrichtung eingestuft (wie in der Richtlinie 94/9/EG, Anhang II, Klausel 1.5 beschrieben).

Die Montage dieses Geräts muss von entsprechend geschultem Personal in Übereinstimmung mit dem anzuwendenden Merkblatt (EN 60079-14 in Europa) vorgenommen werden.

Die Reparatur dieses Geräts muss vom Hersteller oder in Übereinstimmung mit dem anzuwendenden Merkblatt (IEC 60079-19) vorgenommen werden.

Besteht die Möglichkeit, dass das Gerät in Kontakt mit aggressiven Substanzen kommt, liegt es in der Verantwortung des Benutzers, geeignete Vorsichtsmaßnahmen zu treffen, die negative Auswirkungen auf das Gerät verhindern und so dafür zu sorgen, dass der Schutztyp nicht beeinträchtigt wird.

Aggressive Substanzen – z. B. saure Flüssigkeiten oder Gase, die Metalle angreifen, oder Lösungsmittel, die ätzend auf Polymerstoffe wirken.

Geeignete Vorsichtsmaßnahmen – z. B. regelmäßige Prüfungen als Teil von Routineinspektionen oder Überprüfung im Materialdatenblatt, dass das Gerät gegenüber bestimmten Chemikalien beständig ist.

**Der Öl/Wasser-Schichtdickenmesser ist zertifiziert anhand der Klassifizierung für Gefahrenbereiche**

 **II 1G Ex ia IIB T4 Ga**

<b>Vorsicht</b>	<p><b>Nur</b> Duracell-Batterie MN1604 verwenden.</p> <p>Batterie <b>immer</b> in sicherem Bereich tauschen.</p> <p>Dieses Produkt muss vor Einführung in einen Tank, einen Brunnen usw. geerdet sein und bis zum vollständigen Abzug geerdet bleiben.</p> <p><b>Nur</b> mit einem feuchten Tuch säubern, wenn das Band/die Sonde von einem Tank, Brunnen usw. entfernt wird</p> <p>Das Messgerät kann in Außenbereichen eingesetzt werden. Es sollte allerdings nicht ohne weiteren Schutz an Standorten eingesetzt werden, an denen es längerer Zeit rauen Witterungsbedingungen ausgesetzt sein kann.</p>
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<b>Allgemeiner Betrieb</b>	<p>Dieses Produkt besitzt keine automatische Ausschaltung. Es muss <b>EIN-</b> und <b>AUSGESCHALTET</b> werden.</p> <p>Im Standby-Betrieb besitzt die Batterie eine Laufzeit von etwa 36 Stunden.</p> <p>Alle Wartungsarbeiten dürfen <b>nur</b> in einem sicheren Bereich durchgeführt werden.</p>
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## 9.1 Maintenance

## 9.2 Allgemeines

Falls die Spule und der Rahmen mit Wasser gereinigt werden müssen, immer zuerst das Elektronikmodul in der Spule entfernen. Dazu die Befestigungsvorrichtungen (F) lösen und das gesamte Modul herauschieben. HINWEIS – Nur wie unten beschrieben reinigen.

Der Zugang zur Batterie erfolgt über den Deckel (E). HINWEIS – Die Bedienperson muss immer dafür sorgen, dass jederzeit der richtige Batterietyp eingesetzt ist. Siehe dazu den Abschnitt „Wichtige Hinweise“ am Anfang dieses Handbuchs.

## 9.3 Pflege der Spule

Falls die Spule und der Rahmen mit Wasser gereinigt werden müssen, immer vor dem Waschen das elektronische Bedienfeld an der Gerätevorderseite entfernen. Die Spule kann mit diesen Lösungen gereinigt werden:

<i>Aliphaten:</i>	Hexan Heptan Weißes Kerosin
<i>Alkohole:</i>	Methyl Isopropyl Isobutyl
<i>Halogenierte Kohlenwasserstoffe:</i>	Freone TF Freone TE
<i>Sonstige:</i>	Seifenlösung mit Naptha Alconox 10 % Die meisten im Handel erhältlichen Reinigungslösungen

## 9.4 Pflege von Band und Sonde

Band und Sonde können mit den folgenden Stoffen gereinigt und entfettet werden:

<i>Alkohole:</i>	Methyl Isopropyl Isobutyl
<i>Aliphaten:</i>	Hexan Heptan
<i>Halogenierte Kohlenwasserstoffe:</i>	Vollständig halogeniertes Freon
<i>Sonstige:</i>	Seifenlösung mit Naptha Alconox 10 %

*Hinweis:* Band oder Sonde nicht mit Schleifmittel reinigen

Die Sondenlinse besteht aus einem amorphen Thermoplast, der gegenüber vielen Chemikalien überaus beständig ist. Allerdings sollte ein Kontakt vermieden werden mit:

- Chloroform 1.1.2 Trichlorethan
- Teilhalogenierte Kohlenwasserstoffe wie Methylenchlorid, Ketone wie Methylethylketon, Phenol (gesättigte Lösung).

# Oil Water Interface Meter

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## 9.5 EG-Konformitätserklärung

<b>PRODUKTE</b>	<b>IM1.1-20</b>	Tragbarer Öl/Wasser-Schichtdickenmesser
	<b>IM1.1-30</b>	Tragbarer Öl/Wasser-Schichtdickenmesser
	<b>IM1.1-60</b>	Tragbarer Öl/Wasser-Schichtdickenmesser
	<b>IM1.1-100</b>	Tragbarer Öl/Wasser-Schichtdickenmesser

Geotechnical Instruments (UK) Ltd. erklärt, dass der/die oben genannten Artikel mit den folgenden Normen konform sind:

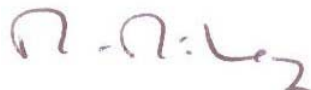
### ATEX-Richtlinie 94/9/EG

Zertifizierungsbehörde: SIRA Certification Service  
Nummer der Behörde: 0518  
Adresse: Rake Lane, Eccleston, Chester, CH4 9JN, Großbritannien  
Zertifikatsnummer: Sira 04ATEX2366  
Angewandte Normen: EN 60079-0:2006  
EN 60079-11:2007  
EN 60079-26:2007

### EMV-Richtlinie 89/336/EWG

Angewandte Normen: EN 50081-1:1994 Störaussendung  
EN 50082-1:1992 Störfestigkeit  
EN 50082-1:1992 Elektrostatische Entladung  
EN 50082-1:1992 Stromspeisung

Unterschrift:



Dr. Roger Riley

**Manager für Neuprodukteinführungen und  
Bevollmächtigter**

## 10. Istruzioni specifiche per le installazioni in aree pericolose

(Vedere la direttiva europea ATEX 94/9/EC, Allegato II, 1.0.6.)

Le seguenti istruzioni valgono per le apparecchiature coperte dai numeri di certificato Sira 04ATEX2366:

L'apparecchiatura può essere ubicata in aree in cui possono essere presenti gas e vapori infiammabili del gruppo IIB. Questa apparecchiatura è certificata unicamente per l'uso con temperature ambiente comprese nell'intervallo da -20 °C a +40 °C e non va usata con temperature al di fuori di questo intervallo

L'apparecchiatura non è stata classificata come dispositivo sicuro in base a quanto previsto dalla Direttiva 94/9/EC Allegato II, clausola 1.5.

La riparazione di questa apparecchiatura va eseguita da parte di personale adeguatamente formato, nel rispetto del codice di pratica applicabile (norma europea EN 60079-14).

La riparazione di questa apparecchiatura va eseguita da parte del produttore o nel rispetto del codice di pratica applicabile (IEC 60079-19).

Se è probabile che l'apparecchiatura venga a contatto con sostanze aggressive, è l'utente a essere l'unico responsabile dell'adozione delle opportune precauzioni che ne impediscano l'uso non sicuro, facendo quindi in modo che le protezioni utilizzate non vengano danneggiate.

Sostanze aggressive - es.: liquidi o gas acidi che potrebbero attaccare i metalli, oppure solventi che potrebbero agire sui materiali polimerici

Precauzioni idonee - es.: controlli regolari nell'ambito di controlli di routine o verifica dei dati del materiale per appurare che esso è resistente a prodotti chimici specifici

**Il misuratore dell'interfaccia di olio/acqua è stato certificato in base alla classificazione delle aree pericolose**



**II 1G Ex ia IIB T4 Ga**

<b>Attenzione</b>	Usare <b>solo</b> una batteria Duracell MN1604. Sostituire la batteria <b>solo</b> in un'area sicura. Prima dell'introduzione in un serbatoio, in un pozzo, ecc..., questo prodotto va collegato a massa e deve restare collegato fino al completo ritiro. Durante la rimozione del nastro della sonda da un serbatoio, pozzo, ecc..., pulire <b>solo</b> con un panno umido, ecc... Il misuratore può essere utilizzato all'aperto. Tuttavia, non va utilizzato in luoghi in cui potrebbe essere soggetto alle intemperie per lunghi periodi senza ulteriori protezioni.
<b>Funzionamento generale</b>	Questo prodotto non dispone di una funzione di spegnimento automatico. Va <b>ACCESO</b> e <b>SPENTO manualmente</b> . Nella modalità standby, la batteria dura circa 36 ore. Qualsiasi operazione di manutenzione va effettuata <b>solo</b> in un'area sicura.

# Oil Water Interface Meter

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## 10.1 Maintenance

## 10.2 Informazioni generali

Se si ha l'esigenza di pulire la bobina e il telaio con acqua, prima rimuovere sempre il modulo elettronico nella bobina svitando i dispositivi di fissaggio (F) ed estraendo l'intero modulo. NOTA – pulire sempre in base a quanto previsto dalle istruzioni seguenti.

Per accedere alla batteria, aprire il coperchio dello scomparto (E). NOTA – l'operatore deve sempre garantire l'installazione del tipo di batteria corretto. Consultare la sezione "Note importanti" all'inizio di questo manuale.

## 10.3 Manutenzione della bobina

Quando si ha l'esigenza di pulire la bobina e il telaio con acqua, prima rimuovere sempre il pannello anteriore elettronico. La bobina potrebbe venire pulita con queste soluzioni:

<i>Alifatici:</i>	Esano Ottano Cherosene bianco
<i>Alcoli:</i>	Metile Isopropile Isobutile
<i>Idrocarburi alogenati:</i>	Freon, tossici e infiammabili Freon, equivalenti tossici
<i>Altri:</i>	Soluzione di sapone con nafta Alconox 10% La maggior parte delle soluzioni pulenti a base di detergenti disponibili in commercio

## 10.4 Manutenzione di nastro e sonda

Il nastro e la sonda possono essere puliti e sgrassati con i seguenti elementi:

<i>Alcoli:</i>	Metile Isopropile Isobutile
<i>Alifatici:</i>	Esano Ottano
<i>Idrocarburi alogenati:</i>	Freon completamente alogenato
<i>Altri:</i>	Soluzione di sapone con nafta Alconox 10%

*Nota:* non pulire il nastro e la sonda con prodotti abrasivi

L'obiettivo della sonda è di termoplastica amorfa, altamente resistente a numerosi prodotti chimici, ma è necessario evitare il contatto con:

- Cloroformio 1.1.2 Tricloroetano
- Idrocarburi parzialmente alogenati come cloruro di metile, chetoni come il fenolo M.E.K. (soluzione satura).

## 10.5 Dichiarazione di conformità EC

<b>PRODOTTI</b>	<b>IM1.1-20</b>	Misuratore dell'interfaccia olio/acqua portatile
	<b>IM1.1-30</b>	Misuratore dell'interfaccia olio/acqua portatile
	<b>IM1.1-60</b>	Misuratore dell'interfaccia olio/acqua portatile
	<b>IM1.1-100</b>	Misuratore dell'interfaccia olio/acqua portatile

Geotechnical Instruments (UK) Ltd dichiara che gli elementi sopra descritti sono conformi ai seguenti standard:


### Direttiva ATEX 94/9/EC

Ente certificatore: Assistenza certificazione SIRA  
Numero ente notificato: 0518  
Indirizzo: Rake Lane, Eccleston, Chester, CH4 9JN, Regno Unito  
Numero certificato: Sira 04ATEX2366  
Standard applicati: EN 60079-0:2006  
EN 60079-11:2007  
EN 60079-26:2007

### Direttiva EMC 89/336/EEC

Standard applicati: EN50081-1:1994 Emissioni irradiate  
EN50082-1:1992 Suscettibilità irradiata  
EN50082-1:1992 E.S.D.  
EN50082-1:1992 Iniezione corrente totale

Firma:



Dott. Roger Riley

**Responsabile dell'introduzione di nuovi prodotti e persona autorizzata**

Geotechnical Instruments (UK) Ltd

## 11. Instrucciones específicas para instalaciones en zonas peligrosas

(Referencia: Directiva Europea ATEX 94/9/EC, Anexo II, 1.0.6.)

Las instrucciones siguientes son aplicables a los equipos cubiertos por los números de homologación: Sira 04ATEX2366:

Este equipo puede ubicarse donde pueda haber gases y vapores inflamables del grupo IIB presentes. El equipo sólo está homologado para utilizarse a temperaturas ambientes en el intervalo de -20°C a +40°C y no debe usarse fuera de este intervalo.

El equipo no ha sido evaluado como dispositivo relacionado con la seguridad (según se menciona en la Directiva 94/9/EC Anexo II, cláusula 1.5).

La instalación de este equipo debe realizarla personal adecuadamente formado y de acuerdo con el código de práctica pertinente (EN 60079-14 en Europa).

La reparación de este equipo sólo debe realizarla el fabricante o de acuerdo con el código de práctica pertinente (IEC 60079-19).

Si es probable que el equipo entre en contacto con sustancias agresivas, el usuario es el responsable de tomar las precauciones apropiadas para evitar que se dañe y de garantizar que no se comprometa el tipo de protección.

Substancias agresivas - por ejemplo, líquidos y gases ácidos que pueden atacar los metales, o disolventes que pueden afectar los materiales poliméricos  
Precauciones adecuadas - por ejemplo, comprobaciones regulares como parte de las inspecciones rutinarias o establecimiento, a partir de las hojas de datos de los materiales, de los productos químicos a los que es específicamente resistente

**El medidor de interfase aceite/agua ha sido homologado en la clasificación de zonas peligrosas como**

 **II 1G Ex ia IIB T4 Ga**

<b>Precaución</b>	Use <b>solamente</b> pilas Duracell MN1604. Cambie las pilas <b>solamente</b> en una zona segura. Este producto debe ser puesto a tierra antes de introducirlo en un tanque, pozo, etc. y debe permanecer puesto a tierra hasta su retirada completa. Límpielo <b>solamente</b> con un paño húmedo cuando retire la cinta/sonda del tanque, pozo, etc. El medidor se puede usar a la intemperie. No obstante, no debe usarse sin protección adicional en lugares donde pueda estar sometido durante períodos largos a las inclemencias atmosféricas.
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<b>Funcionamiento general</b>	<p>Este producto no tiene desconexión automática. Debe <b>CONECTARSE</b> y <b>DESCONECTARSE</b>.</p> <p>En el modo de descanso la pila durará unas 36 horas.</p> <p>Cualquier mantenimiento debe realizarse <b>solamente</b> en una zona segura.</p>
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## 11.1 Maintenance

## 11.2 Generalidades

Si es necesario limpiar con agua el carrete y el bastidor, retire siempre antes el módulo electrónico del carrete, soltando las fijaciones (F) y sacando el módulo completo. **NOTA:** limpiar sólo con los productos indicados más adelante.

Se accede a la pila abriendo la tapa del compartimento (E). **NOTA:** el operador debe asegurarse siempre de colocar el tipo de pila correcto. Consulte la sección 'Notas Importantes' al principio de este manual.

## 11.3 Cuidado del carrete

Si el carrete y el bastidor deben limpiarse con agua, antes de lavarlos retire siempre el panel electrónico delantero. El carrete puede limpiarse con las soluciones siguientes:

<i>Alifáticos:</i>	Hexano Heptano Queroseno blanco
<i>Alcoholes:</i>	Metílico Isopropílico Isobutílico
<i>Hidrocarburos halogenados:</i>	Freones TF Freones TE
<i>Otros:</i>	Solución jabonosa con naftaalconox al 10% La mayoría de las soluciones limpiadoras disponibles en comercios basadas en detergentes

## 11.4 Cuidado de la cinta y la sonda

La cinta y la sonda se pueden limpiar y desengrasar con lo siguiente:

<i>Alcoholes:</i>	Metílico Isopropílico Isobutílico
<i>Alifáticos:</i>	Hexano Heptano
<i>Hidrocarburos halogenados:</i>	Freon totalmente halogenado
<i>Otros:</i>	Solución jabonosa con naftaalconox al 10%

**Nota:** No limpie la cinta ni la sonda con productos abrasivos

La lente de la sonda está fabricada con termoplástico amorfo, altamente resistente a muchos productos químicos. Sin embargo, debe evitarse el contacto con:

- Cloroformo; 1.1.2 Tricloroetano
- Hidrocarburos parcialmente halogenados como cloruro de metileno, acetonas como metiletilcetona, fenol (solución saturada).

# Oil Water Interface Meter

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## 11.5 Declaración de conformidad CE

<b>PRODUCTOS</b>	<b>IM1.1-20</b>	Medidor portátil de interfase aceite/agua
	<b>IM1.1-30</b>	Medidor portátil de interfase aceite/agua
	<b>IM1.1-60</b>	Medidor portátil de interfase aceite/agua
	<b>IM1.1-100</b>	Medidor portátil de interfase aceite/agua

Geotechnical Instruments (UK) Ltd. declara que los elementos descritos cumplen las normas siguientes:


### Directiva ATEX 94/9/EC

Entidad de homologación: SIRA Certification Service  
Número notificado de la entidad: 0518  
Dirección: Rake Lane, Eccleston, Chester, CH4 9JN Inglaterra  
Número del certificado: Sira 04ATEX2366  
Normas aplicadas: EN 60079-0:2006  
EN 60079-11:2007  
EN 60079-26:2007

### Directiva CEM 89/336/EEC

Normas aplicadas: EN50081-1:1994 Emisiones radiadas  
EN50082-1:1992 Susceptibilidad radiada  
EN50082-1:1992 E.S.D.  
EN50082-1:1992 Inyección masiva de corriente

Firmado:



Dr. Roger Riley

**Director de NPI (Introducción de Productos Nuevos) y persona autorizada**

Geotechnical Instruments (UK) Ltd

## 12. WEEE Compliance

The wheelie bin symbol displayed on equipment supplied by Geotechnical Instruments signifies that the apparatus must not be disposed of through the normal municipal waste stream but through a registered recycling scheme.

The Waste Electrical and Electronic Equipment directive (WEEE) makes producers responsible from July 1<sup>st</sup> 2007 in meeting their obligations, with the fundamental aim of reducing the environmental impact of electrical and electronic equipment at the end of its life.

Geotechnical is now registered with the Environmental Agency as a producer and has joined a recycling scheme provider who will manage and report on our electrical waste on the company's behalf.

### **Our Producer Registration Number is WEE/GB0052TQ**

When your instrument is at the end of its life, please contact the Geotechnical Instruments sales team who will advise you on the next step in order to help us meet our WEEE obligations.

