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#### EC TYPE-EXAMINATION CERTIFICATE

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: Sira 10ATEX2066X Issue: 4

4 Equipment: Handheld Radio Transceiver HT Series HT8XX and HT9XX

5 Applicant: Entel UK Ltd

6 Address: 320 Centennial Avenue

Centennial Park

Elstree

Borehamwood Herts, WD6 3TJ

UK

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2006 EN 60079-11:2007 EN 60079-0:2009 (used for guidance in respect of marking)

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- 11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:

HT8XX

II 2G

Ex ib IIA T4 Gb

Ta = -20°C to +40°C

нт9хх

 $\langle \mathbf{x} \rangle$ 

Ex ib IIC T4 Gb

II 2G

Ta = -20°C to +40°C

C Ellaby

**Deputy Certification Manager** 

Project Number 70004821

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**Sira Certification Service** 

Rake Lane, Eccleston, Chester, CH4 9JN, England





#### **EC TYPE-EXAMINATION CERTIFICATE**

Sira 10ATEX2066X Issue 4

#### 13 **DESCRIPTION OF EQUIPMENT**

The Handheld Radio Transceiver HT Series is comprised of a range of hand held, battery powered, portable, two way radios. Each model has a plastic enclosure containing printed circuit boards and a keypad. Radios not fitted with a liquid crystal display are indicated below in the list of the models below. A transmit/receive antenna is mounted externally by a screw connection. The battery supply is contained in a separate pack which is attached to the main enclosure by plastic clips and secured by a locking screw. The battery supply comprises two, rechargeable, lithium ion cells connected in series. The battery pack maintains intrinsic safety when separated, permitting removal in a hazardous area. The battery pack shall not be recharged in a hazardous area.

The complete range is comprised of the following models:

Gas Group IIC UHF(400-520MHz)		and	Gas Group IIA UHF(400-520MHz)	
7-key, LCD	HT981, HT981S		3-key, no LCD	HT882IIA,HT882SIIA, HT882TIIA,HT882RIIA, HT882UIIA,HT882SUIIA, HT882TUIIA,HT882RUIIA
3-key, no LCD	HT952, HT982, HT982S, HT982T, HT982R, HT982U, HT982SU, HT982TU, HT982RU, HT982HUR		3-key, LCD	HT883IIA, HT883UIIA, HT883SIIA, HT883SUIIA
3-key, LCD	HT953, HT983, HT983U, HT983S, HT983SU		8-key, LCD	HT885IIA, HT885TIIA, HT885RIIA, HT885UIIA, HT885TUIIA, HT885RUIIA
8-key, LCD	HT985, HT985T, HT985R, HT985U, HT985TU HT985RU		8-key + 0-9, LCD	HT886IIA, HT886TIIA, HT886RIIA, HT886UIIA, HT886TUIIA, HT886RUIIA
8-key + 0-9, LCD	HT986, HT986T, HT986R, HT986U, HT986TU, HT986RU			
VHF (mid band 66-88M	•		VHF (66-88MHz)	
3-key, no LCD	HT912, HT912S,		3-key, no LCD	HT812IIA, HT812SIIA,
	HT912T, HT912R			HT812TIIA, HT812RIIA
3-key, LCD	HT913, HT913S		3-key, LCD	HT813IIA, HT813SIIA
8-key, LCD	HT915, HT915T,		8-key, LCD	HT815IIA, HT815TIIA,
	HT915R			HT815RIIA
8-key + 0-9, LCD	HT916, HT916T, HT916R		8-key + 0-9, LCD	HT816IIA, HT816TIIA, HT816RIIA
VHF band (136-174MH	z)		VHF band (136-174M)	Hz)
3-key, no LCD	HT922, HT922S, HT922T HT922R, HT942, HT942 ATIS		3-key, no LCD	HT822IIA, HT822SIIA, HT822TIIA, HT822RIIA, HT842IIA, HT842IIA ATIS
3-key, LCD	HT923 HT923S		3-key, LCD	HT823IIA HT823SIIA
7-key, LCD	HT944, HT944 ATIS		7-key, LCD	HT844IIA, HT844IIA ATIS
8-key, LCD	HT925, HT925T HT925R		8-key, LCD	HT825IIA, HT825TIIA HT825RIIA
8-key + 0-9, LCD	HT926, HT926T HT926R		8-key + <b>0-</b> 9, LCD	HT826IIA, HT826TIIA HT826RIIA

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#### **EC TYPE-EXAMINATION CERTIFICATE**

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An external multi-pin screw threaded connector is provided for earphone and microphone accessories. Only the specified types of accessories are permitted for use in hazardous areas.

The following accessories are permitted for use with all models:

CMP950 microphone EA/19/950 earpiece microphone EA15/950 ear/microphone

CHP950HD ear defender CHP950HS ear defender

SAVOX C-C500 microphone/speaker unit (Certificate VTT 06 ATEX 043X)

The following accessories are permitted for use **only** with the ATEX certified models, HT981, HT981S:

SAVOX 100+ Radio microphone/speaker unit (Certificate VTT 06 ATEX 036X)

SAVOX 400 microphone/speaker unit (Certificate VTT 05 ATEX 009X)

#### **Variation 1** - This variation introduced the following change:

The introduction of a new VHF RF printed circuit board which is a variation of the original VHF Board.

#### **Variation 2** - This variation introduced the following change:

- The use of the following accessories was recognised; these may **only** be used with the models HT981, HT981S, HT983, HT983U, HT983S and HT983SU:
  - Savox, FPS-COM. (Certificate number ITS08ATEX25772X). (Certificate number ITS03ATEX21290X).

# Scott Health and Safety Ltd, SABRE-COM.

- The inclusion of the following previously certified accessory, this accessory can be used with any, ATEX certified model.
  - FPS-COM-Plus VA R-C (Certificate number ITS11ATEX27318X).

#### **Variation 4** - This variation introduced the following change:

**Variation 3** - This variation introduced the following change:

The following accessories were recognised for use with all models:

EA12/950 earphone/microphone PTT951 push to talk switch

PTT951C push to talk switch EHP9 earphone PTT951E push to talk switch EHP950 earphone

CHP950D ear defender headset EPT40 earphone/microphone CXR16 throat earphone/microphone CXR5 skull earphone/microphone

The following currently listed accessories were updated and their description changed: ii.

**From** To

CMP950 microphone CMP950 speaker/microphone CHP950HD ear defender CHP950HD ear defender headset CHP950HS ear defender CHP950HS ear defender headset EA15/950 ear/microphone EA15/950 earphone/microphone EA/19/950 earpiece microphone EA19/950 earphone/microphone

The SAVOX C-C500 microphone/speaker unit (Certificate VTT 06 ATEX 043X) previously restricted to use with radio models HT981, HT981S may now be used with all radio models. The Description of Equipment and Special Conditions for Safe Use, 15.1, were amended accordingly.

iv. The introduction of an additional Special Condition For Safe Use.

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#### **EC TYPE-EXAMINATION CERTIFICATE**

Sira 10ATEX2066X Issue 4

**Variation 5** - This variation introduced the following changes:

- ii. A revision of the battery pack circuits to form a new battery pack to replace the existing battery pack, marketed as types CNB950E V2, CNB850E V2, were approved. The marking was amended and the Special Condition For Safe Use was removed as a result of this change.
- iii. The current limit from the battery has been increased from 2.0 A to 2.14 A by the active current limiting circuit.
- iv. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, EN 60079-0:2009 and EN 60079-11:2007 were replaced by EN 60079-0:2012 and EN 60079-11:2012.

#### 14 **DESCRIPTIVE DOCUMENTS**

#### 14.1 Drawings

Refer to Certificate Annexe.

#### 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	11 May 2010	R21484A/00	The release of the prime certificate (Associated with
	-	R21484B/00	R21484A/00) including Variation 1 (Associated with
			R21484B/00).
1	22 December 2010	R23211A/00	The introduction of Variation 2.
2	20 December 2011	R25998A/00	The introduction of Variation 3.
3	10 September 2012	R25998B/00	The introduction of Variation 4.
4	28 May 2015	R70004821A	The introduction of Variation 5

#### 15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)

15.1 These Handheld Radio Transceivers shall only be used with the specific, permitted accessories that are detailed in the table below:

Accessory	Permitted models
CMP950 speaker/microphone	All
CHP950HD ear defender headset	All
CHP950HS ear defender headset	All
EA15/950 earphone/microphone	All
EA19/950 earphone/microphone	All
SAVOX C-C500 microphone/speaker unit (Cert. no.VTT 06 ATEX 043X)	All
SAVOX 100+ Radio microphone/speaker unit (Cert. no. VTT 06 ATEX 036X)	HT981, HT981S
SAVOX 400 microphone/speaker unit (Cert. no. VTT 05 ATEX 009X)	HT981, HT981S
Savox, FPS-COM (Cert. no.ITS08ATEX25772X)	HT981, HT981S, HT983, HT983U, HT983S &
	HT983SU
Scott Health and Safety Ltd, SABRE-COM (Cert. no. ITS03ATEX21290X)	HT981, HT981S, HT983, HT983U, HT983S &
	HT983SU
FPS-COM-Plus VA R-C (Cert. no. ITS11ATEX27318X)	All

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#### **EC TYPE-EXAMINATION CERTIFICATE**

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Accessory	Permitted models
PTT951 push to talk switch	All
PTT951C push to talk switch	All
PTT951E push to talk switch	All
EHP950 earphone	All
CHP950D ear defender headset	All
CXR16 throat earphone/microphone	All
CXR5 skull earphone/microphone	All
EA12/950 earphone/microphone	All
EHP9 earphone	All
EPT40 earphone/microphone	All

- 15.2 The equipment battery pack shall only be recharged with the dedicated, Entel, battery re-charging equipment supplied.
- 15.3 The equipment battery pack shall not be recharged in a hazardous atmosphere.
- 15.4 This equipment may incorporate previously certified accessories, therefore, when in operation, the user shall take into account any restrictions or special conditions for safe use that are applicable to these accessories.
- No precautions against electrostatic discharge are necessary for portable equipment that has an enclosure made of plastic, metal or a combination of the two, except where a significant static-generating mechanism has been identified. Activities such as placing the item in a pocket or on a belt, operating a keypad or cleaning with a damp cloth, do not present a significant electrostatic risk. However, where a static-generating mechanism is identified, such as repeated brushing against clothing, then suitable precautions shall be taken, e.g. the use of anti-static footwear.

#### 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

#### 17 **CONDITIONS OF CERTIFICATION**

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.
- 17.3 The manufacturer shall take all reasonable steps to ensure that the user complies with any restrictions and special conditions for certification associated with the previously certified accessories that are employed in the particular piece of equipment they have supplied, in addition, the manufacturer shall provide the user with an appropriate copy of the certificate for each certified accessory that is involved.

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**Sira Certification Service** 

Rake Lane, Eccleston, Chester, CH4 9JN, England

Certificate Number: Sira 10ATEX2066X

**Equipment:** Handheld Radio Transceiver HT Series

HT8XX and HT9XX

Applicant: Entel UK Ltd



# Issue 0 Drawings associated with report R21484A/00:

Drawing No.	Sheet	Date	Rev.	Description
General	•			
ATEX-GA-01	1 of 1	23 Sep 09	01	General Assembly
ATEX-UHF CN-01	1 to 2	29 Sep 09	01	UHF certification notes, general
ATEX-VHF CN-01	1 to 2	29 Sep 09	01	VHF certification notes, general
ATEX-LABEL CAT2-02	1 of 1	08 Mar 10	01	Labels, HT9XX, HT8XX
Control PCB (Common)				
ATEX-UCTL-01	1 of 1	29 Sep 09	01	Control PCB Schematic
ATEX-UCTL-02	1 of 6	29 Sep 09	01	Control PCB Layer 1 Component Layout
ATEX-UCTL-02	2 of 6	29 Sep 09	01	Control PCB Layer 1
ATEX-UCTL-02	3 of 6	29 Sep 09	01	Control PCB Layer 2
ATEX-UCTL-02	4 of 6	29 Sep 09	01	Control PCB Layer 3
ATEX-UCTL-02	5 of 6	29 Sep 09	01	Control PCB Layer 4
ATEX-UCTL-02	6 of 6	29 Sep 09	01	Control PCB Layer 4 Component Layout
ATEX-UCTL-03	1 of 2	29 Sep 09	01	Control PCB Layer 1 location of encapsulated comps
ATEX-UCTL-03	2 of 2	29 Sep 09	01	Control PCB Layer 4 location of encapsulated comps
ATEX-UCTL CN-01	1 of 4	29 Sep 09	01	Certification notes, Supply nets, Control PCB Layer 1
ATEX-UCTL CN-01	2 of 4	29 Sep 09	01	Certification notes, Supply nets, Control PCB Layer 2
ATEX-UCTL CN-01	3 of 4	29 Sep 09	01	Certification notes, Supply nets, Control PCB Layer 3
ATEX-UCTL CN-01	4 of 4	29 Sep 09	01	Certification notes, Supply nets, Control PCB Layer 4
UHF RF PCB				
ATEX-UHF RF-01	1 of 2	29 Sep 09	01	UHF RF PCB Schematic, RF Circuit
ATEX-UHF RF-01	2 of 2	29 Sep 09	01	UHF RF PCB Schematic, Power Circuit
ATEX-UHF RF-02	1 of 6	29 Sep 09	01	UHF RF PCB Layer 1 Component Locations
ATEX-UHF RF-02	2 of 6	29 Sep 09	01	UHF RF PCB Layer 1
ATEX-UHF RF-02	3 of 6	29 Sep 09	01	UHF RF PCB Layer 2
ATEX-UHF RF-02	4 of 6	29 Sep 09	01	UHF RF PCB Layer 3
ATEX-UHF RF-02	5 of 6	29 Sep 09	01	UHF RF PCB Layer 4
ATEX-UHF RF-02	6 of 6	29 Sep 09	01	UHF RF PCB Layer 4 Component Locations
ATEX-UHF RF-03	1 of 2	29 Sep 09	01	UHF RF PCB Layer 1 location of encapsulated compnts
ATEX-UHF RF-03	2 of 2	29 Sep 09	01	UHF RF PCB Layer 4 location of encapsulated compnts
ATEX-UHF RF CN-01	1 of 4	29 Sep 09	01	Certification notes, Supply Circuits Creepage, RF Layer 1
ATEX-UHF RF CN-01	2 of 4	29 Sep 09	01	Certification notes, Supply Circuits Creepage, RF Layer 2
ATEX-UHF RF CN-01	3 of 4	29 Sep 09	01	Certification notes, Supply Circuits Creepage, RF Layer 3
ATEX-UHF RF CN-01	4 of 4	29 Sep 09	01	Certification notes, Supply Circuits Creepage, RF Layer 4
ATEX-UHF RF CN-02	1 of 4	29 Sep 09	01	Certification notes, Q12-Q15 Circuits, RF Layer 1
ATEX-UHF RF CN-02	2 of 4	29 Sep 09	01	Certification notes, Q12-Q15 Circuits, RF Layer 2
ATEX-UHF RF CN-02	3 of 4	29 Sep 09	01	Certification notes, Q12-Q15 Circuits, RF Layer 3
ATEX-UHF RF CN-02	4 of 4	29 Sep 09	01	Certification notes, Q12-Q15 Circuits, RF Layer 4
ATEX-UHF TF-01	1 of 1	29 Sep 09	01	UHF RF PCB Layer 1 Thermal Fuse Plan
VHFL RF PCB				
ATEX-VHFL RF-01	1 of 2	29 Sep 09	01	VHF(Low) RF PCB Schematic, RF Circuit
ATEX-VHFL RF-01	2 of 2	29 Sep 09	01	VHF(Low) RF PCB Schematic, Power Circuit
ATEX-VHFL RF-02	1 of 6	29 Sep 09	01	VHFL RF PCB Layer 1 Component Locations
ATEX-VHFL RF-02	2 of 6	29 Sep 09	01	VHFL RF PCB Layer 1

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# **Sira Certification Service**

Rake Lane, Eccleston, Chester, CH4 9JN, England

Certificate Number: Sira 10ATEX2066X

**Equipment:** Handheld Radio Transceiver HT Series

HT8XX and HT9XX

Applicant: Entel UK Ltd



Drawing No.	Sheet	Date	Rev.	Description
VHFL RF PCB (Continued		Date	i Kev.	Description
ATEX-VHFL RF-02	3 of 6	29 Sep 09	01	VHFL RF PCB Layer 2
ATEX-VHFL RF-02	4 of 6	29 Sep 09	01	VHFL RF PCB Layer 3
ATEX-VHFL RF-02	5 of 6	•	01	VHFL RF PCB Layer 4
ATEX-VHFL RF-02	6 of 6	29 Sep 09 29 Sep 09	01	
		<del>                                     </del>	01	VHFL RF PCB Layer 4 Component Locations
ATEX-VHFL RF-03	1 of 2	29 Sep 09		VHFL RF PCB Layer 1 location of encapsulated compnts
ATEX-VHFL RF-03	2 of 2	29 Sep 09	01	VHFL RF PCB Layer 4 location of encapsulated compnts
ATEX-VHFL RF CN-01	1 of 4	29 Sep 09	01	Certification notes, Supply Circuits Creepage, RF Layer 1
ATEX-VHFL RF CN-01	2 of 4	29 Sep 09	01	Certification notes, Supply Circuits Creepage, RF Layer 2
ATEX-VHFL RF CN-01	3 of 4	29 Sep 09	01	Certification notes, Supply Circuits Creepage, RF Layer 3
ATEX-VHFL RF CN-01	4 of 4	29 Sep 09	01	Certification notes, Supply Circuits Creepage, RF Layer 4
ATEX-VHFL RF CN-02	1 of 4	29 Sep 09	01	Certification notes, Q12-Q15 Circuits, RF Layer 1
ATEX-VHFL RF CN-02	2 of 4	29 Sep 09	01	Certification notes, Q12-Q15 Circuits, RF Layer 2
ATEX-VHFL RF CN-02	3 of 4	29 Sep 09	01	Certification notes, Q12-Q15 Circuits, RF Layer 3
ATEX-VHFL RF CN-02	4 of 4	29 Sep 09	01	Certification notes, Q12-Q15 Circuits, RF Layer 4
ATEX-VHFL TF-01	1 of 1	29 Sep 09	01	VHF(LOW) RF PCB Layer 1Thermal Fuse Plan
CNB940 Battery Pack (TI		ns of these drawings		
CNB940 cg1.2	1 of 1	-	2	CNB940 Charging Circuit
-	1 of 1	13.10.2004	03	CNB940 Charging PCB details
-	1 of 1	2004.02.13	01	CNB940 Protection Circuit
-	1 of 1	11.10.2004	1.3	CNB940 Design Notes
-	1 to 3	Sep 01 2004	-	Battery-040421.pcb (note: Sira stamp date 24/02/2010)
CNB950E Battery Pack				
ATEX-CNB950E-01	1 of 1	15 Oct 09	01	CNB950E, CNB850E Battery Pack Certification Notes
ATEX-CNB950E-02	1 of 1	15 Oct 09	01	CNB950E, CNB850E Charging Circuit Schematic
ATEX-CNB950E-03	1 of 1	15 Oct 09	01	CNB950E, CNB850E Charging PCB details
ATEX-CNB950E-04	1 of 1	15 Oct 09	01	CNB950E, CNB850E Protection Circuit Schematic
ATEX-CNB950E-05	1 of 1	15 Oct 09	01	CNB 950E, CNB850E Protection PCB details
ATEX-CNB950E-06	1 of 1	15 Oct 09	01	CNB 950E, CNB850E Internal Assembly
ATEX-CNB950E-07	1 of 1	15 Oct 09	01	CNB950E, CNB850E Block Diagram
ATEX-CNB950E-08	1 of 1	15 Oct 09	01	CNB950E, CNB850E External connections
ATEX-CNB950E-09	1 of 1	15 Oct 09	01	CNB950E, CNB850E General Assembly
ATEX-CNB950E-10	1 of 1	15 Oct 09	01	CNB950E, CNB850E Flexible Connectors Assy
ATEX-CNB950E-11	1 of 1	10 Mar 10	02	CNB950E, CNB850E battery pack labels
Accessories				,
ATEX-ACC-01	1 of 1	15 Oct 09	01	Accessories Socket PCB details
ATEX-ACC-02	1 of 1	10 Mar 10	02	Audio Accessories for HT900 Series ATEX Radios

## Drawings associated with report R21484B/00:

Drawing No.	Sheet	Date (Sira stamp)	Rev.	Description
General				
ATEX-VHF CN-02	1 to 2	16 Apr 10	01	VHF certification notes, general
VHF RF PCB				
ATEX-VHF RF-01	1 of 2	07 May 10	01	VHF RF PCB Schematic, RF Circuit
ATEX-VHF RF-01	2 of 2	16 Apr 10	01	VHF RF PCB Schematic, Power Circuit
ATEX-VHF RF-02	1 of 6	16 Apr 10	01	VHF RF PCB Layer 1 Component Locations

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Certificate Number: Sira 10ATEX2066X

**Equipment:** Handheld Radio Transceiver HT Series

HT8XX and HT9XX

Applicant: Entel UK Ltd



Drawing No.	Sheet	Date (Sira stamp)	Rev.	Description
VHF RF PCB (Continue	d)			
ATEX-VHF RF-02	2 of 6	16 Apr 10	01	VHF RF PCB Layer 1
ATEX-VHF RF-02	3 of 6	16 Apr 10	01	VHF RF PCB Layer 2
ATEX-VHF RF-02	4 of 6	16 Apr 10	01	VHF RF PCB Layer 3
ATEX-VHF RF-02	5 of 6	16 Apr 10	01	VHF RF PCB Layer 4
ATEX-VHF RF-02	6 of 6	16 Apr 10	01	VHF RF PCB Layer 4 Component Locations
ATEX-VHF RF-03	1 of 2	16 Apr 10	01	VHF RF PCB Layer 1 location of encapsulated compnts
ATEX-VHF RF-03	2 of 2	16 Apr 10	01	VHF RF PCB Layer 4 location of encapsulated compnts
ATEX-VHF RF CN-01	1 of 4	16 Apr 10	01	Certification notes, Supply Circuits Creepage, RF Layer 1
ATEX-VHF RF CN-01	2 of 4	16 Apr 10	01	Certification notes, Supply Circuits Creepage, RF Layer 2
ATEX-VHF RF CN-01	3 of 4	16 Apr 10	01	Certification notes, Supply Circuits Creepage, RF Layer 3
ATEX-VHF RF CN-01	4 of 4	16 Apr 10	01	Certification notes, Supply Circuits Creepage, RF Layer 4
ATEX-VHF RF CN-02	1 of 4	16 Apr 10	01	Certification notes, Q12-Q15 Circuits, RF Layer 1
ATEX-VHF RF CN-02	2 of 4	16 Apr 10	01	Certification notes, Q12-Q15 Circuits, RF Layer 2
ATEX-VHF RF CN-02	3 of 4	16 Apr 10	01	Certification notes, Q12-Q15 Circuits, RF Layer 3
ATEX-VHF RF CN-02	4 of 4	16 Apr 10	01	Certification notes, Q12-Q15 Circuits, RF Layer 4
ATEX-VHF TF-01	1 of 1	16 Apr 10	01	VHF(LOW) RF PCB Layer 1Thermal Fuse Plan

**Issue 1** (No new drawings were introduced.)

**Issue 2** (No new drawings were introduced.)

#### Issue 3

Drawing	Sheets	Date (Sira stamp)	Rev.	Title
CMP950				
ATEX-CMP950-01	1 of 1	01 Jun 12	01	CMP950 General assembly
ATEX-CMP950-02	1 of 1	01 Jun 12	01	CMP950 Internal schematic
ATEX-CMP950-03	1 to 4	01 Jun 12	01	CMP950 PCB layers
ATEX-CMP950-04	1 of 1	01 Jun 12	01	CMP950 Labels
ATEX-CMP950-05	1 to 5	01 Jun 12	01	CMP950 BOM
ATEX-CMP950-06	1 of 1	01 Jun 12	01	CMP950 Insulation sheet
ATEX-CMP950-07	1 to 2	20 Aug 12	01	CMP950 PCB Layers 1 and 2 separations
Drawing	Sheets	Date (Sira stamp)	Rev	Title
EHP9 earphone				
ATEX-EHP9-01	1 of 1	01 Jun 12	01	EHP9 General assembly, material, label
ATEX-EHP9-02	1 of 1	01 Jun 12	01	EHP9 to CMP950 Connection schematic
Drawing	Sheets	Date (Sira stamp)	Rev.	Title
EA12/950, EA15/950				microphone
ATEX-EAXX/950-01	1 of 1	01 Jun 12	01	EAXX/950 GA
ATEX-EAXX/950-02	1 of 3	01 Jun 12	01	EA12/950 PTT schematic
ATEX-EAXX/950-02	2 of 3	01 Jun 12	01	EA15/950 PTT schematic
ATEX-EAXX/950-02	3 of 3	01 Jun 12	01	EA19/950 PTT schematic
ATEX-EAXX/950-03	1 of 4	01 Jun 12	01	EAXX/950 PTT PCB layer 1 component
ATEX-EAXX/950-03	2 of 4	01 Jun 12	01	EAXX/950 PTT PCB layer 1
ATEX-EAXX/950-03	3 of 4	01 Jun 12	01	EAXX/950 PTT PCB layer 2
ATEX-EAXX/950-03	4 of 4	01 Jun 12	01	EAXX/950 PTT PCB layer 2 component
ATEX-EAXX/950-04	1 of 1	01 Jun 12	01	EAXX/950 BOM

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**Equipment:** Handheld Radio Transceiver HT Series

HT8XX and HT9XX

Applicant: Entel UK Ltd



Drawing	Sheets	Date (Sira stamp)	Rev.	Title	
ATEX-EAXX/950-05	1 of 2	01 Jun 12	01	EAXX/950 PTT PCB layer 1 separations	
ATEX-EAXX/950-05	2 of 2	01 Jun 12	01	EAXX/950 PTT PCB layer 2 separations	
ATEX-EAXX/950-06	1 of 1	01 Jun 12	01	EAXX/950 PTT PCB Insulation sheet	
ATEX_EA15-950-01	1 of 1	01 Jun 12	01	EA15/950 Accessory connector plug GA	
ATEX EA15-950-02	1 of 1	01 Jun 12	01	EA15/950 Accessory connector plug schematic	
ATEX EA15-950-03	1 of 2	01 Jun 12	01	EA15/950 Connection plug PCB layer1	
ATEX_EA15-950-03	2 of 2	01 Jun 12	01	EA15/950 Connection plug PCB layer2	
ATEX EA15-950-04	1 of 1	01 Jun 12	01	EA15/950 plug insulation sheet	
				,	
Drawing	Sheets	Date (Sira stamp)	Rev.	Title	
EHP950 earphone				EUDOEO OA	
ATEX-EHP950-01	1 of 1	01 Jun 12	01	EHP950 GA	
ATEX-EHP950-02	1 of 1	01 Jun 12	01	EHP950 to Radio Connection Schematic	
ATEX-EHP950-03	1 of 2	01 Jun 12	01	EHP 950 connection plug PCB layer 1	
ATEX-EHP950-03	2 of 2	01 June12	01	EHP 950 connection plug PCB layer 2	
ATEX-EHP950-04	1 of 1	01 Jun 12	01	EHP 950 plug insulation sheet	
Drawing	Sheets	Date (Sira stamp)	Rev.	Title	
CHP950 D (headband	d earphone,	/mic) /HS (helmet o	earphon	e/mic) /HD (helmet earphone/mic) headsets	
ATEX-CHP950-01	1 of 1	01 Jun 12	01	CHP950 General Assembly	
ATEX-CHP950-02	1 of 1	01 Jun 12	01	CHP950 to PTT951 Connection Schematic	
ATEX-CHP950-03	1 of 1	01 Jun 12	01	CHP950 Series label	
Drawing	Sheets	Date (Sira stamp)	Rev.	Title	
PTT951, PTT951C, P					
ATEX-PTT951-01	1 of 1	01 Jun 12	01	PTT951 GA	
ATEX-PTT951-04	1 of 1	01 Jun 12	01	PTT951 Label	
ATEX-PTT951-07	1 of 1	01 Jun 12	01	PTT951 Insulation sheet	
PTT951					
ATEX-PTT951-02	1 of 1	01 Jun 12	01	PTT951 Schematic	
ATEX-PTT951-03	1 of 4	01 Jun 12	01	PTT951 PCB Layer 1 Components	
ATEX-PTT951-03	2 of 4	01 Jun 12	01	PTT951 PCB Layer 1	
ATEX-PTT951-03	3 of 4	01 Jun 12	01	PTT951 PCB Layer 2	
ATEX-PTT951-03	4 of 4	01 Jun 12	01	PTT951 PCB Layer 2 Components	
ATEX-PTT951-05	1 to 5	01 Jun 12	01	PTT951 BOM	
ATEX-PTT951-06	1 of 2	01 Jun 12	01	PTT951 PCB layer 1 separations	
ATEX-PTT951-06	2 of 2	01 Jun 12	01	PTT951 PCB layer 2 separations	
PTT951C, PTT951E					
ATEX-PTT951CE-02	1 of 1	13 Jul 12	01	PTT951C/E Schematic	
ATEX-PTT951CE-03	1 of 4	13 Jul 12	01	PTT951C/E PCB Layer 1 Components	
ATEX-PTT951CE-03	2 of 4	13 Jul 12	01	PTT951C/E PCB Layer 1	
ATEX-PTT951CE-03	3 of 4	13 Jul 12	01	PTT951C/E PCB Layer 2	
ATEX-PTT951CE-03	4 of 4	13 Jul 12	01	PTT951C/E PCB Layer 2 Components	
ATEX-PTT951CE-05	1 to 5	13 Jul 12	01	PTT951C/E BOM	
ATEX-PTT951CE-06	1 of 2	13 Jul 12	01	PTT951C/E PCB layer 1 separations	
	2 of 2	13 Jul 12		PTT951C/E PCB layer 2 separations	

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# **Sira Certification Service**

Rake Lane, Eccleston, Chester, CH4 9JN, England

Certificate Number: Sira 10ATEX2066X

**Equipment:** Handheld Radio Transceiver HT Series

HT8XX and HT9XX

Applicant: Entel UK Ltd



Drawing	Sheets	Date (Sira stamp)	Rev	Title				
EPT40 earphone/micro	EPT40 earphone/microphone							
ATEX-EPT40-950-01	1 of 1	01 Jun 12	01	EPT40 GA				
ATEX-EPT40-950-02	1 of 1	01 Jun 12	01	EPT to PTT951 connection schematic				
D	Charle	Data (no. 1)	D :	Tul.				
Drawing	Sheets	Date(Sira stamp)	Rev.	Title				
CXR5, CXR16								
ATEX-CXR-950-01	1 of 1	01 Jun 12	01	CXR GA				
ATEX-CXR-950-02	1 of 1	01 Jun 12	01	CXR to PTT951 connection schematic				
Drawing	Sheets	Date(Sira stamp)	Rev.	Title				
Tag Label								
ATEX-TAG-LAB-01	1 of 1	18 Jul 12	01	Accessory tag label				

#### **Issue 4**

Drawing	Sheets	Date(Sira stamp)	Rev	Title			
battery pack, types CNB950E V2, CNB850E V2, CNB550E V2							
Ex-CNB950E V2-01	1 of 1	14 May 15	02	Block diagram			
Ex-CNB950E V2-02	1 of 1	14 May 15	01	Battery pack general assembly			
Ex-CNB950E V2-03	1 of 1	14 May 15	01	Ext connections			
Ex-CNB950E V2-04	1 of 1	14 May 15	01	Battery pack internal assemb <mark>l</mark> y			
Ex-CNB950E V2-05	1 of 1	14 May 15	01	Interboard flexi schematic			
Ex-CNB950E V2-06	1 of 1	14 May 15	01	Interboard flexi PCB			
Ex-CNB950E V2-07	1 of 1	14 May 15	01	Charging input flexi schematic			
Ex-CNB950E V2-08	1 of 2	14 May 15	01	Charging input flexi PCB layer 1			
Ex-CNB950E V2-08	2 of 2	14 May 15	01	Charging input flexi PCB layer 2			
Ex-CNB950E V2-09	1 of 1	14 May 15	02	Limiter schematic			
Ex-CNB950E V2-10	1 to 3	14 May 15	02	Limiter PCB			
Ex-CNB950E V2-11	1 of 1	14 May 15	01	Charge control schematic			
Ex-CNB950E V2-12	1 to 4	14 May 15	01	Charging control PCB			
Ex-CNB950E V2-13	1 of 1	28 May 15	01	Labels			
Ex-CNB950E V2-14	1 of 1	14 May 15	01	Charging control PCB BOM			
Ex-CNB950E V2-15	1 to 2	14 May 15	01	Limiter PCB BOM			
Ex-CNB950E V2-16	1 to 7	14 May 15	01	Charging PCB separations, sheets 1-7			
Ex-CNB950E V2-17	1 to 4	14 May 15	01	limiting PCB separations sheets 1-4			
Ex-CNB950E V2-18	1 to 4	14 May 15	01	Battery pack assembly separations			

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**Sira Certification Service**Rake Lane, Eccleston, Chester, CH4 9JN, England