



EC - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

- EC - Type Examination Certificate Number: **Baseefa06ATEX0317X**
- Equipment or Protective System: **BAR Code Scanner Terminal Type CK32IS**
- Manufacturer: **Intermec Technologies Corporation**
- Address: **6001 36th Avenue West, Everett, Washington, 98203, USA**
- This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- Baseefa (2001) Ltd., Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in confidential Report No. **05(C)0573**
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 60079-0: 2004 EN 50020: 2002 IEC 61241-0: 2004 IEC 61241-11: 2005**
- except in respect of those requirements listed at item 18 of the Schedule.
- If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- This EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- The marking of the equipment or protective system shall include the following :

Ex I M1 / II 1GD Ex ia I/II C T4 (-20°C ≤ Ta ≤ +50°C) Ex iaD 20 T250°C (-20°C ≤ Ta ≤ +50°C)

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **5391**

Project File No. **05/0573**

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa (2001) Ltd
Registered in England No. 4305578 at the above address

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa (2001) Ltd.



13

Schedule

14

Certificate Number Baseefa06ATEX0317X

15 Description of Equipment or Protective System

The BAR Code Scanner Terminal Type CK32IS is designed to scan bar-codes, store the information in its internal memory and communicate with external equipment via the integral Ethernet, CF Radio or Bluetooth Radio interfaces.

The apparatus is a hand-held portable device that comprises a battery-pack which is replaceable in the hazardous area, and several PCB's (some encapsulated) all contained within a sealed plastic housing. The apparatus has a keypad and display with touch-screen on the front face, the Bar-Code scanner situated on the end of the apparatus and an optional handle fitted to the underside complete with scanner trigger.

The only external electrical connections made to the apparatus other than the replaceable battery pack are the Ethernet and USB interfaces.

Battery Pack Charge Connections

$$U_m = 18\text{Vdc}$$

The battery pack is designed to be charged when disconnected from the BAR Code Scanner Terminal in the non-hazardous area only.

Battery Pack Output Connector

$$\begin{aligned}U_o &= 8.4\text{V} \\I_o &= 5.93\text{A} \\P_o &= 8.04\text{W} \\C_i &= 0 \\L_i &= 0\end{aligned}$$

Main Board Power Input Connections

$$\begin{aligned}U_i &= 8.4\text{V} \\P_i &= 9\text{W} \\C_i &= 0 \\L_i &= 0 \\U_o &= 8.4\text{V} \\I_o &= 7.2\text{A}\end{aligned}$$

Ethernet and USB Connector

$$\begin{aligned}U_o &= 4.61\text{V} \\I_o &= 344\text{mA} \\P_o &= 396\text{mW} \\C_i &= 0 \\L_i &= 125\text{uH} \\C_o &= 36\text{uF} \\L_o &= 25\text{uH} \\U_i &= 4.61\text{V}\end{aligned}$$



16 Report Number

05(C)0573

17 Special Conditions for Safe Use

1. The apparatus is not certified for use in the presence of conductive dusts as defined in section 3 of IEC 61241-0.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
100-001	1 of 1	G	03/28/07	CK32AS I-Safe Overview Block Diagram
120-120	1 of 1	C	03/26/07	Flex, Scanner, EV10 CK31CA, ROHS
145-146	1 of 1	B	02/28/07	PCB, Good Read LED, CK32AS
145-166	1 of 1	C	02/28/07	PCB, Antenna Safety Coupler, CK32AS
145-174	1 of 1	C	02/28/07	PCB, 42-Key Keypad, CK32, I-Safe
145-175	1 of 1	C	02/28/07	PCB, 56-Key Keypad, CK32, I-Safe
145-187	1 of 1	B	02/28/07	PCB, I/O Connector CK32AS
145-196	1 of 1	B	02/28/07	PCB, Speaker, 0.062 Thick, CK32AS ROHS
145-198-TRACE	1 to 2	003	----	PCB, Battery Contact CK32 (Artwork)
145-198	1 of 1	D	03/07/07	PCB, Battery Contact CK32
145-200	1 of 1	B1	05/26/06	PCB, Antenna Safety Coupler 2, CK32AS
145-225-TRACE	1 to 12	004	---	PCB, Main, CK32 I-Safe (Artwork)
145-225	1 to 2	J	02/28/07	PCB, Main, K32 I-Safe
145-226-TRACE	1 to 8	002	---	PCB, LCD Interface, CK32 I-Safe (Artwork)
145-226	1 of 1	D	02/28/07	PCB, LCD Interface, CK32 I-Safe
145-227-TRACE	1 to 8	003	---	PCB, Protection CK32 I-Safe (Artwork)
145-227	1 of 1	E	02/28/07	PCB, Protection, CK32 I-Safe
145-285	1 of 1	C	03/02/07	PCB, Antenna, CK32AS
220-081	1 of 1	C	03.24/07	Beeper Assy, CK32AS
220-083	1 to 2	B	02/28/07	Flex Assy, Display Backlight, CK32AS
220-084	1 of 1	B	02/28/07	Flex Circuit, I/O Connector, CK32
220-093	1 of 1	A	02/23/07	Flex, Keypad, Z-Fold, Ultra-Thin, ROHS, CK32AS
220-094	1 to 2	A	02/23/07	Flex Assy, LCD Jumper, 60-Pin, CK32AS
220-095	1 to 2	B	02/28/07	Flex Circuit Assy, Microphone, CK32AS, ROHS
224-584	1 of 1	D	02/26/07	PCB Assy, Switch, Reed, Trigger, ROHS
224-592	1 to 2	B	02/28/07	PCB Assy, Good Read LED, CK32AS
224-625	1 to 2	C	02/28/07	PCB Assy, 42-Key Keypad, CK32, I-Safe
224-626	1 to 2	C	02/28/07	PCB Assy, 56-Key Keypad, CK32, I-Safe
224-645	1 to 2	B	02/28/07	PCB Assy, I/O Connector, CK32
224-657	1 to 2	B	02/28/07	PCB Assy, Speaker, CK32AS, ROHS



Number	Sheet	Issue	Date	Description
224-659	1 of 1	A	03/02/07	PCB Assembly, Battery Contact, CK32AS
224-691	1 to 9	M	03/03/07	PCB Assy. Main CK32 I-Safe
224-692	1 to 3	E	03/09/07	PCB Assy. LCD, CK32 I-Safe
224-693	1 to 5	G	03/24/07	PCB Assy, Protection, CK32, I-Safe
224-987	1 to 2	C	03/29/07	PCB Assy. Antenna, CK32AS
236-118	1 of 1	B	03/24/07	Cable Assy, Safety Wires, LCD to Prot, CK32AS
236-119	1 of 1	B	03/24/07	Cable Assy, Safety Wires, Prot to LCD, CK32AS
236-120	1 of 1	B	03/24/07	Cable Assy, Power Supply, Prot to LCD, CK32AS
236-121	1 of 1	B	03/24/07	Cable Assy, Power Supply, LCD to Prot, CK32AS
236-130	1 of 1	B	03/24/07	Cable Assy, Power Supply, Prot to LCD, CK32AS
236-131	1 of 1	B	03/24/07	Cable Assy, Power Supply, LCD to Prot, CK32AS
245-257	1 to 6	B	03/23/07	Common Parts, CK32
318-019	1 of 1	A	03/09/07	Battery Pack Assy, CK32AS
318-021	1 of 1	A	03/08/07	Battery Pack, AB6
334-050	1 to 3	B	--	Speaker, 28mm, 8 ohm
346-309	1 to 2	D	02/26/07	Touchscreen, CK32, ROHS
506-478-002	1 of 1	A	04/24/06	Schematic, Intermec CK32 I-Safe Battery Pack Safety Circuit
506-478-003	1 of 1	A	04/24/06	Schematic, Intermec CK32 I-Safe Battery Pack Contact Board
509-478-002-TRACE	1 to 3	A	---	PCB, Intermec CK32 I-Safe, Battery Pack Protection Board (Artwork)
509-478-002	1 to 2	A	15/03/06	PCB, Intermec CK32 I-Safe Battery Pack Protection Board
509-478-003-TRACE	1 to 2	A	---	PCB, Intermec CK32 I-Safe, Battery Pack Contact Board (Artwork)
509-478-003	1 to 2	A	25/04/06	PCB, Intermec CK32 I-Safe Battery Pack Contact Board
591-829	1 of 1	B	03/24/07	Speaker, S/M, Side Emitter, 8 ohm
632-379	1 to 8	A	03/23/07	Encapsulation/Insulation Layouts
632-641	1 to 13	A	--	CK32 Handheld PCB Rework Instruction
642-462	1 to 2	B	03/23/07	Cover, Top, CK32AS, Family
642-466	1 of 1	B	03/29/07	Seal, Main Housing, CK32
642-471	1 of 1	B	03/23/07	Housing, Battery, Top, CK32AS
642-472	1 of 1	B	03/23/07	Housing, Battery, Bottom, CK32AS
642-473	1 of 1	B	03/23/07	Housing, Lower, CK32AS
642-522	1 of 1	B	03/23/07	Cover, Antenna, CK32AS
642-625	1 to 2	B	04/03/07	Handle Back, Overmolded, AH4
642-626	1 to 2	B	04/03/07	Handle Case, Left, AH4
642-627	1 to 2	B	04/03/07	Handle Case, Right, AH4
654-729	1 to 2	A	01/30/07	Insulator, Main PCB, CK32
715-438	1 to 3	B	03/22/07	Display Assy, LCD, CK32AS



Number	Sheet	Issue	Date	Description
715-451	1 to 2	B	03/23/07	Core Assy, Electronics, CK32AS
754-817	1 of 1	A	03/09/07	Cover Assy, Bottom, CK32AS
805-817	1 of 1	B	03/24/07	Cable Assy. 802.11 Antenna, CK32
805-818	1 of 1	B	03/24/07	Cable Assy. BT Antenna, CK32
805-819	1 of 1	A	03/08/07	Antenna Assy, 802.11/BT, CK32
819-089	1 of 1	06	12/14/06	Lbl Die, Laser Warning, CK32AS
819-092	1 of 1	A	01/26/07	Lbl Graphic, Battery Pack, Cert, CK32AS
819-102	1 & 2 of 5	A	03/06/07	Label Set, I-Safe/Cert, Family, CK32AS
865-019	1 of 1	2	02/03/06	Window, Scanner, CK32AS
SCH_S9a2_UB	1 to 18	1.6	03/24/07	EV10 Scan Engine (Optical Scanner)
DRCB0M1	1 to 2	S0D	10/20/05	<802.11 Radio Module>
0533 BTM311	1 to 2	4A-3	10/14/04	<Bluetooth Module>