



Every Second Counts When You Save People's Lives



ELECTRICAL SPECIFICATION - GSM OPTION SPECIFICATION

Power Supply	Pager internal secondary Li – Polymer Battery 150mAh Nominal Operating Voltage : 3.8 V Operating voltage range : 3.4 ~ 4.2 V
Talk Time	Continue voice : Min. 10 Minute
Secondary Battery Recharge Time	On Charger base : Max. 2 hr Internal Charger : Max. 8 hr
Operation Temperature	- 10 ~ + 50 deg C
Storage Temperature	- 40 ~ + 80 deg C

INDUSTRY DESIGN SPECIFICATION

Display	Dot Matrix 81 x 132
Dimensions	55 W x 82.8 H x 24.5 D mm (Basic & SV Model) 55 W x 89.8 H x 26.0 D mm (GSM Model)
Weight	105 gram (Basic Model)/123 gram (GSM Model)

CERTIFICATION

Shock test	IEC60068-2-27
Vibration test	IEC 68-2-6
drop test	IEC 68-2-32
Absorption Rate, SAR (For GSM Model)	IEC 62209-2
EMC (For GSM Model)	GSM (Radio Spectrum). Standard: EN 301 511 and 3GPP 51.010-1 EMC (Electromagnetic Compatibility). Standards: EN 301 489-1 and EN 301 489-7 LVD (Low Voltage Directive) Standards: EN 60 950
Water and Dust Proof	IP 64
CE	Yes
UL	Basic or SV option Model Class I, Groups C,D Class II, Division II, Groups F and G GSM option Model Class I, Division II Groups A, B, C, D Class II, Division II, Groups F and G
FCC	FCC 47 Part 22, Part 24 (GSM 1900) FCC 47 Part 15
BOS	Basic Model: DME II 38/10 GSM Model: DME II 41/10
PTCRB, GCF (For GSM Model)	NAPRD.03, GCF-CC
RoHS	Yes
ATEX (optional)	Yes

OPTIONAL ACCESSORY

• Standard Charger	• Product Configuration Programmer
• Backup / Restore PC software DVD	



A New Generation Feature Pager -Auto Acknowledgement

Can Let Dispatch Center Know:

- Your Pager Status?
- Did You Receive The Dispatch?
- What's Your Response of This Dispatch?

Being A Medical Staff Member, Have You Ever Encountered The Problems Below ?

1. Receiving an emergency message without having proper devices to reply to the message?
2. As an emergency rescuer, have you ever been in a situation which doesn't allow you to receive messages when you are out of range from an on-site signal coverage?
3. Medical personnel's electronic data can not be disclosed according to HIPPA (USA) requirements. What can you do?

E3 Basic & GSM Model Series

New POCSAG / FLEX Paging Solution



Dear Sir / Madam,
Being a medical staff member, have you ever encountered the problems below ?

- 1. Receiving an emergency message without having proper devices to reply to the message?**
- 2. As an emergency rescuer, have you ever been in a situation which doesn't allow you to receive messages when you are out of range from an on-site signal coverage?**
- 3. Medical personnel's electronic data can not be disclosed according to HIPPA (USA) requirements. What can you do?**

Are you interested in getting to know our newly launched digital paging product for MISSION CRITICAL and HIGHER DEMAND better? We would like to take this opportunity to present our latest Unication Paging Solutions and products to you.

E3 SERIES MODEL RUGGED PAGER

E3 Series (POCSAG/FLEX) IP64 rugged pager was designed for harsh working environment, such as firefighting, disaster rescue and emergency missions. Unication E3 pager retains the best functions of the current alphanumeric pager and even redefine the paging system with 2 way communication (GSM ACK-BACK Function) device. Here are the major features that you should not miss out.

IMPORTANT FEATURE

✓ 3 Kinds Of Message Acknowledgment <GSM/GPRS MODEL>

+Received ACK

An auto acknowledgment message; when the pager receives message, the "Received ACK" will be sent automatically.

+Read ACK

An auto acknowledgment message; when the message is read, the "Read ACK" will be sent automatically.

+Response ACK

E3 provides 12 SMS options which are programmable as the response option for the pager user to select. The pager users can select the proper SMS and send to the console for status report.

✓ IP64 Rugged Designed Pager

For harsh working environment, such as firefighting, disaster rescue, and emergency missions.

✓ 7 Backlights To Be Your Message Indicator

7 coloured backlights help you to note the source of the message quickly.

✓ Dual Frequency

E3 provides 2 frequency programmabilities; also with the capability to program 32 profiles for the duty arrangement. Automatic switching scheduling when you are on duty or off duty, or out of coverage area.

WHO'S UNICATION ?

Unication has been developing wireless communication products for about 2 decades and one of our main strains is High end paging products. With 20 years of experiences in design and manufacture for Wellknown Brand and the biggest supplier of national carrier in North America. We believe the value that "we put customers in front of us" makes Unication a long-lasting brand. We hear what customers demand and come back with more than they ask and we hope we can show this points through our products to you.

WHY CHOOSE E3 ?

1. Acknowledgement Function:

Integrated with GSM/GPRS module into POCSAG/FLEX alerting, rugged pager now allows its alert recipients to send an acknowledgement to confirm whether he or she can carry out a task or operation. By that, the dispatch center will be able to know how many team members can take part in the emergency rescue.

3 types of Acknowledgement are supported:

- RECEIVED ACK
- READ ACK
- RESPONSE ACK

2. Dual Frequency:

Receiving channels will be adjusted automatically when duty is switched. Unication has combined two pagers as one, and also provides an efficient, accurate and reliable alerting receiver to public safety market.

3. Message Encryption Function:

Data transmission security has getting its importance in digital POCSAG/FLEX paging. With 128bits AES/IDEA Encryption, Unication's comprehensive program and sophisticated encryption algorithms tie the security and flexibility by OTA (Over The Air programming). In addition, automatic periodic encryption key variations allow the message management determine security bar.

4. 7 Backlights Setting:

Unication provides 7 coloured programmable backlights as the best intuitive indication for the pager users to identify the important level of each message without operating the pagers.

5. A More Ruggedized Specification:

E3 with rugged design passed IP-64 STANDARD water/dust proof tests, 1.5 meter drop test; it is perfectly conducted in hospital for first-aid and medical personnel.

OTHER KEY FEATURES

1. Physical Interface:

- Key Features For
 - 5 individual hard keys: MENU key/READ key/FUNCTION STATUS key/POWER key/NAVIGATION key.
 - 2 inch big screen – easy reading message. – unread message remind.

2. Message Receiving:

- Key Features For
 - Encryption.
 - 32 Profile / 32 Folder.
 - 7 coloured programmable backlights .
 - Programmable alert tone for each folder.
 - Unread message LED Flash Light.

3. Message Storage:

- Key Features For
 - Folder for important message.
 - Leading code for each folder.
 - Different alert tones for each folder.

4. Message Read:

- Key Features For
 - Read message password protection.
 - Message auto-display.

5. Other Features:

- Hand programming
- Multi-profile
- Volume adjustment
- Battery life bar display
- Ni-MH rechargeable/alkaline battery switchable
- Built in calendar
- PPS data print function
- Relay switch
- Data backup storage



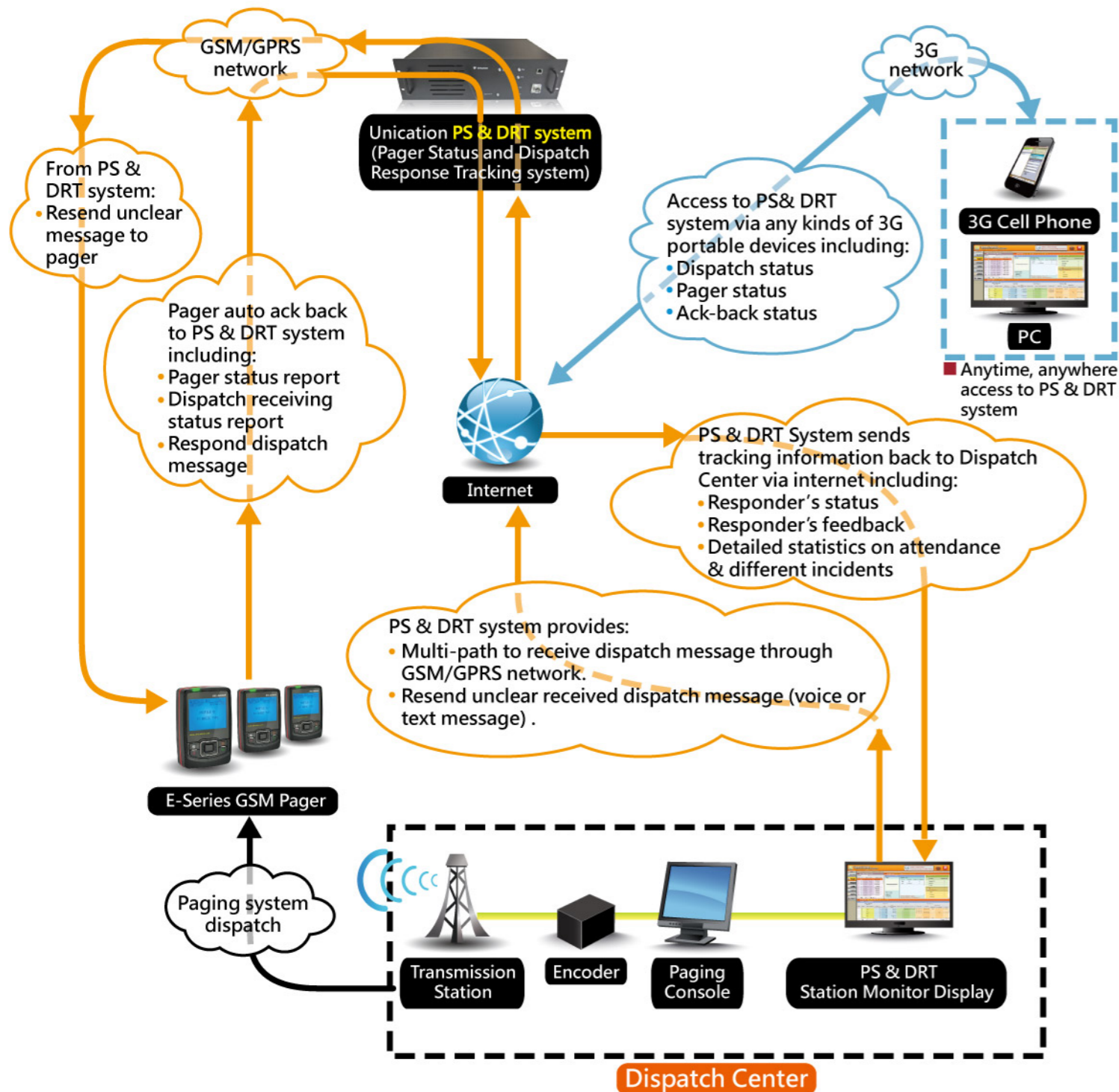
WE OFFER YOU A SOLUTION CAN CHANGE YOUR 1-WAY ALPHA PAGER INTO 2-WAY

NEW GENERATION DISPATCHING SYSTEM FEATURES — PAGER STATUS & DISPATCH RESPONSE TRACKING SYSTEM

Traditional Text Pager or Paging System is a one-way system which can't display each responder's status and their receiving conditions; most important is that the dispatch center is unable to know the responder's status. For the responders, sometimes they are in weak signal area while receiving the paging from dispatch center without message content, and responders will have to use another device to communicate with dispatch center when they receive the message.

For all these inconvenience, Unication proposed the concept of New Generation Text Pager that solves user's inconvenience. Unication's "E3" Series provides as below.

PS & DRT (PAGER STATUS AND DISPATCH RESPONSE TRACKING SYSTEM) SYSTEM STRUCTURE



WE OFFER YOU A SOLUTION CAN CHANGE YOUR 1-WAY ALPHA PAGER INTO 2-WAY

- Dispatch Operator's ability to know each responder's status before paging, and to decide whom should be paged. — **Unication's patent No.134-780-49**
- Dispatch Center / personnel will be able to know responder's feedback to their message. — **Unication's patent No.134-780-49**
- More detailed statistics on attendance rate and different incidents.
- Dispatch Center will be able to know the whole picture of different events.
- The authorized personnel will be able to sort out qualified responders by expertise and equipment database.

Dispatch Message Interface

The screenshot shows the 'Dispatch Message Interface' in the Unication COM system. It features a 'Called ID List' table and a 'Message Content' section. A 'Group/Responder Detail' table is also visible, showing information for a specific group.

Group Title	Headcount of this Group	Pager No. of User's Party	Pager User's Name	Currently Status of e
				Pager Power Off On

Dispatch Message History Record

The screenshot shows the 'Dispatch Message History Record' in the Unication COM system. It displays a table with columns for Index No., Date, Time, Dispatch, Dispatch Message Content, Group of 1, and This Dispatch Pager Current Status.

Index No.	Date	Time	Dispatch	Dispatch Message Content	Group of 1	This Dispatch Pager Current Status															
						Pager Power	Pager as Duty	Pager	Abile to Receive	Not A	Not A	Not A	Not A	Not A	Not A	Not A					
1	2013-01-10	14:29:49			1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2		14:26:54			1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3		11:55:50			1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4		11:49:47			1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	2013-01-09	21:32:52			0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	2012-08-24	14:44:46			0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	2012-08-16	09:20:48			0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	2012-08-15	16:04:45			0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9		15:52:58			0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10		15:49:57			0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0



STANDARD FEATURES

• Address Capability	• International Date
• Message Types	• Auto Alarm Turn On
• Text Can Message	• Key Click
• Message Storage	• Battery Removed
• Automatic Message Deletion Messages	• Battery Gauge
• Message Management	• Low Battery Indication
• Message Status	• Memory Retention
• Retain Errored Non-Numeric Message	• Battery Saver
• Real-Time Clock and Alarm Clock	• Memory Full Indication
• Time-Stamping	• User Selectable Alerts
• Individual Message Alarm	• International Character Sets

OPTIONAL MEMORY FEATURES

• Memory Cleanup	• Sequential Lockout
• Duplicate Message Detection	

OPTIONAL ALERT FEATURES

• User-Changeable Alert Mode	• Retain Errored Numeric Message
• User-Selectable Alerts	• Manual Alert Reset
• Vibrator	• Reminder Alert Interval and Time-out
• Silent Pager Operating Mode	• Alert Frequency
• Disable All Alerts	• Alert Duration

GSM / GPRS ACKNOWLEDGEMENT FEATURES

• Message Received AUTO ACK	• Message Response manual ACK
• Message Read AUTO ACK	

DATA BACKUP RESTORE OPTIONS

• Backup

GENERAL SPECIFICATION

Channel Space	Narrow and Wide Band PPS Programmable 12.5 KHz and 25 KHz
Band Split and Frequency Range	VHF (137-174 MHz) UHF (448 - 476 MHz)
Protocol	POCSAG/FLEX
Address Capability	> 128 RIC with 512 address/16 FLEX Address
Alert Tone SPL	Minimum audio level SPL >= 84 dB @30cm (UNI Test Tone)
Battery Type	1.5 V (One Standard AA Alkaline Battery) or (Rechargeable AA Ni-MH Battery)
Battery life	30 days
Operation Temperature	-20 ~ + 55 deg C
Storage Temperature	-40 ~ + 80 deg C
Relative Humidity	< 90%

ELECTRICAL SPECIFICATION - DEVICE HARDWARE SPECIFICATION

Channel Space	Narrow Band			Wide Band		
	12.5 KHz and 25 KHz (S/W PPS Selection)					
Band Split and Frequency Range	VHF (137-174 MHz) A Band Split 137 MHz - 148 MHz B Band Split 148 MHz - 161 MHz C Band Split 161 MHz - 174 MHz			UHF (450 - 470 MHz) D Band Split 448 MHz - 462 MHz E Band Split 458 MHz - 470 MHz F Band Split 462 MHz - 476 MHz		
Receiver Type	Synthesized					
Baud Rate (Bps)	512	1200	2400	512	1200	2400
Sensitivity (uV / m) @ 10 numeric characters and Chip Alert / 5 continuous paging without error	3	4	6	3	4	6
Selectivity (dB)	≥ 55	≥ 55	≥ 55	≥ 60	≥ 60	≥ 60
Image Rejection (dB)	≥ 55	≥ 55	≥ 55	≥ 55	≥ 55	≥ 55
Spurious Rejection (dB)	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70
Inter-Modulation Rejection (dB)	≥ 55	≥ 55	≥ 55	≥ 55	≥ 55	≥ 55
Frequency Deviation	+ / - 2.5 KHz			+ / - 4.5 KHz		
Oscillator Stability	+/- 5 ppm			+/- 10 ppm		
Co-Channel Rejection	≥ 8 dB			≥ 8 dB		
Spurious Emission	< 2 nW					
Address Capability	32 RIC with 128 address					
	64 RIC with 256 address					
	128 RIC with 512 address					
Max. Memory Capacity	32 user profiles					
Battery Type	1.5 V (One Standard AA Alkaline Battery) or (Rechargeable AA Ni-MH Battery)					
	3.7 V Li-Polymer rechargeable battery: 150 mA GSM option installed only					
Battery life	30 days (24 hours on; 2 pages per day; without GSM & Voice Recorder used)					

ELECTRICAL SPECIFICATION - GSM OPTION SPECIFICATION

System	North America	GSM-850	DCS-1800/PCS-1900
	Other	GSM-900	DCS-1800/PCS-1900
Band Width And Frequency Range	80 MHz in EGSM 900 70 MHz in GSM 850		170 MHz in DCS 140 MHz in PCS
Sensitivity	-107 dBm		-106 dBm
Transmitting Power Max.	2 W		1 W
TRP	> 22 dBm		> 24.5 dBm
TIS	GSM850 : < -99 dBm GSM 900 : < -100 dBm		< -101.5 dBm
SIM Reader	Phase 2 GSM11.14 -SIM 1.8V and 3V		
Support SMS	1. Mobile Terminated(MT)class 0-3with signaling of new incoming SMS, SIMfull, SMS read 2. Mobile Originated class 0 - 3 with writing, memorize in SIM and sending 3. Cell Broadcast compatible with CB DRX with signaling of new incoming SMS		