



GSM-R test monitor



Serving Cell			
BCCH	69	BSIC	4.6
Rx			-82
Tx	33	C/I	27.6
C1	26	C2	26
RM	-107	DSC	15/15
BPM	6	CCH	0
CI	9112	TS	0
LAI	262-02F-882		

TM-S75a GPS

Deploy, approve and monitor
GSM-R / GSM networks with
comprehensive test monitor

GSM-R technology for railways

TM-S75a GPS

The TM-S75a GPS is the right choice for on the spot GSM-R monitoring of critical network parameters. Measured data can be stored and post-processed by the PC application TrioTrace2.



Technical data

Dimensions	103 x 47 x 18.5 mm [LxWxH]
Weight	99 g
Battery	820 mAh Li-Ion
Operation time	300 hrs. standby 5 hrs. talk
Display	132x176 pixels TFT
Camera	1.3 Megapixel sensor
Data storage	24 MB internal, RS-MMC up to 1GB
Interfaces	Serial, IrDA, USB 2.0, Bluetooth, connector for external antenna by using a phone cradle
Card reader	Mini-SIM
Audio	Integrated hands free
Temperature range	-10°C to +55°C

ASCII / EIRENE

VGCS, VBS, UUS1, eMLPP

FN, PFN, REC

Test monitor

TrioTrace ME midlet for network monitoring without PC

QoS information for GSM-R, GSM, GPRS and EDGE

Forcing functions for channel, band or voice codec

Scanning of single ARFCN or entire band

Measurement data storage internal or on MMC card

Automatic measurement recording is supported after switching on

Mobility

Atch GPRS while IMSI ready

GMM PTMSI E5 26 7D CF

TTLI E5 26 7D CF

T3314

Monitor GSM RAC

Subset GSM P 1/2 RF: 0 RX: -106

Back

(up) Previous (down) Next

Part no.

TM-S75a GPS 3077

System / Standards

Frequency bands	GSM-R/EGSM900/GSM1800/GSM1900
RF output power	Class 4 [2 W] for GSM-R/EGSM900 Class 1 [1 W] for GSM1800/GSM1900
Audio	Triple-rate codec for HR, FR and EFR AMR for non ASCII apps supported
GPS	External Bluetooth® GPS receiver supported

Data services

GPRS class 10	
EDGE class 10	
CSD	
Fax group 3, class 2	
Messaging	MMS, EMS, SMS, CB, IM
Internet access	WAP 2.0
E-mail client	SMTP, POP3

TrioTrace2 PC application

TrioTrace2 SW to visualize the stored measurement data

Analyze stored measurement data in customizable windows

Replay for post analyzing

Export of stored trace files in different formats

C:\Documents and Settings\Markus\MeinTagebuch\TrioTrace2\TrioTrace2_Visual3_199

File Edit View Options Help

13:07:29 7828007

Layer 1

Service	DECTECH	TA	PL	Rx Full	Rx Sub	Qual Full	Qual
Serving	32	7	5	49	49	0	0
Neighbou 1	123	3	1	72	114624	6344	
Neighbou 2	48	3	5	49	162090	4362	
Neighbou 3	92	3	1	46	1471372	19380	
Neighbou 4	88	3	5	102	228209	14520	

Layer 2

APN	TA	PL	TA	PL	TA	PL	TA	PL
APN	16	23	35	35	43	39		
BOCH	32							
NOCC	3	1						
Channel Mode	adaptive full							
TSC	1							

Layer 3

LAC	State	Coverage Activated	
LAC	3376	State	Coverage Activated
CellIdentity	1630	Algo	AS7
WCDMA	262	RF	Re-number
T3212	60	Kay Kc	50 67 23 33 51 55 E0 1F

Layer 4

Time	Frame No.	Channel	Dir	BOCH	Layer 3	Message Type	Layer 2	Header
06:16:43	710644	BOCH	Down			RR PHYSICAL_INFORMATION		MS Length: 0
06:16:43	710644	BOCH	Up			SAP0-D-C-1-Frame, NDI0-NED0-PF0		MS Length: 0 MT
06:16:43	710674	BOCH	Up			SAP0-D-C-1-Frame, NDI0-NED0-PF0		MS Length: 0 MT
06:16:44	710674	BOCH	Down			RR SYSTEM_INFORMATION_TYPE_5		MS Length: 10 MT
06:16:44	710642	BOCH	Up			RR MEASUREMENT_REPORT		MS Length: 10 MT
06:16:44	710644	BOCH	Up			RR MEASUREMENT_REPORT		MS Length: 10 MT

Output

Time Frame No. Channel Dir BOCH Layer 3 Message Type Layer 2 Header

06:16:43 710644 BOCH Down RR PHYSICAL_INFORMATION MS Length: 0

06:16:43 710644 BOCH Up SAP0-D-C-1-Frame, NDI0-NED0-PF0 MS Length: 0 MT

06:16:43 710674 BOCH Up SAP0-D-C-1-Frame, NDI0-NED0-PF0 MS Length: 0 MT

06:16:44 710674 BOCH Down RR SYSTEM_INFORMATION_TYPE_5 MS Length: 10 MT

06:16:44 710642 BOCH Up RR MEASUREMENT_REPORT MS Length: 10 MT

06:16:44 710644 BOCH Up RR MEASUREMENT_REPORT MS Length: 10 MT

Handover 31, Handover 32, Handover 33

Google Earth