

Discover What's Possible™

Anritsu

MX368035A

PHS Signal Generation Software

(For MG3681A Digital Modulation Signal Generator)



For Receiver Testing of PHS System

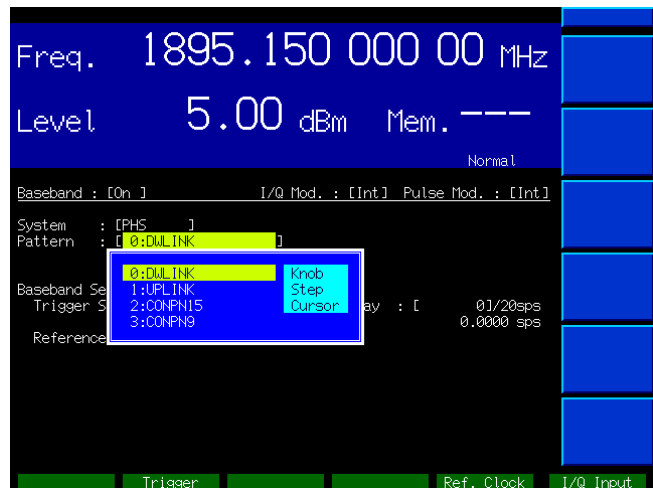
Outputs signals for RCR STD-28 standard PHS system receiver tests

The MX368035A PHS Signal Generation Software is installed in the MU368030A Universal Modulation Unit, when the MU368030A is housed in the MG3681A Digital Modulation Signal Generator. It can output RCR STD-28 standard PHS traffic channel (TCH).

Simple operation and signal pattern change

Signals for receiver tests of UPCH communication CS and PS specified by RCR STD-28 can be outputted by selecting signal pattern stored in a large capacity waveform memory, without setting complicated parameters.

Downlink TCH pattern, Uplink TCH pattern, continuous PN9 modulation and continuous PN15 modulation can be changed.

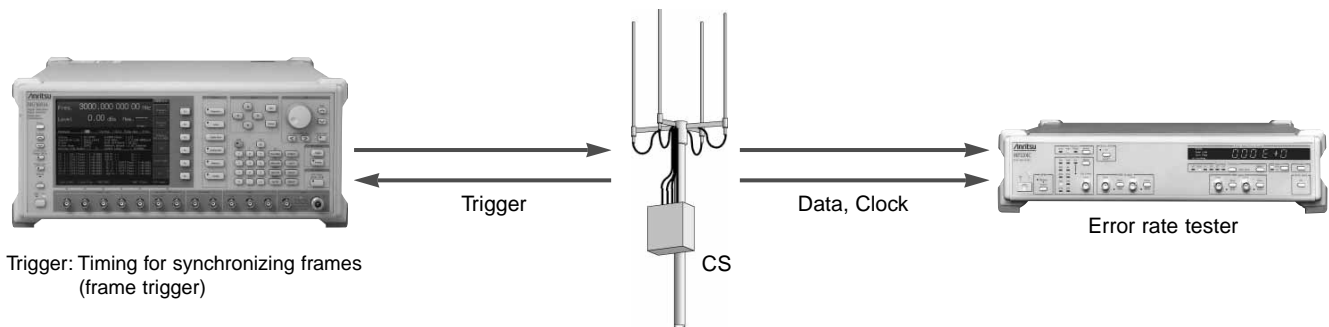


Signal pattern selection

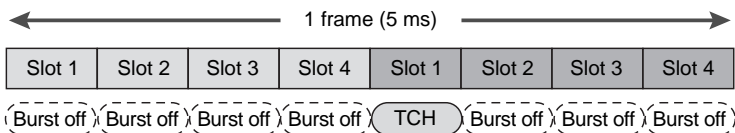
CS test

Receiver tests (BER: Bit Error Rate) can be performed by selecting Uplink TCH pattern required for testing the CS.

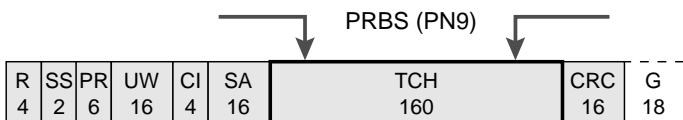
Receiver test



Uplink frame configuration



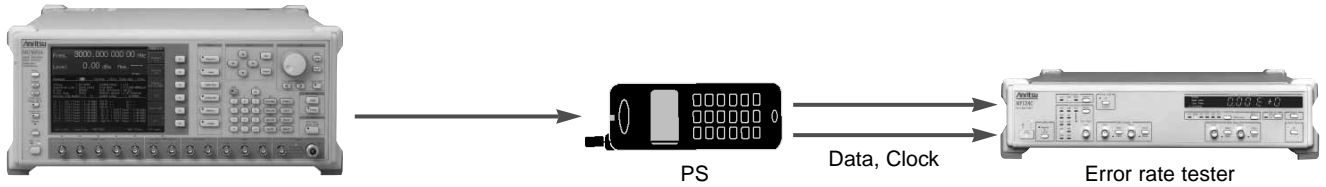
Uplink traffic channel (TCH) Slot configuration



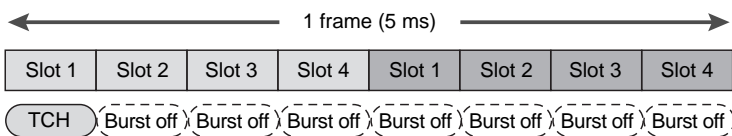
PS test

Receiver tests (BER: Bit Error Rate) can be performed by selecting Downlink TCH pattern required for testing the PS.

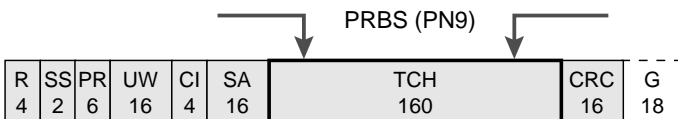
● Receiver test



● Downlink frame configuration



● Downlink traffic channel (TCH) Slot configuration



Specifications

Supported systems/ Modulation method	RCR STD-28 (PHS), $\pi/4$ DQPSK	
Baseband filter	Root Nyquist, Roll-off factor $\alpha = 0.5$	
Modulation data	UPLINK	Slot 1 only: TCH, Slots 2 to 4: Burst off, TCH: PN9 data allocated to adjacent TCH area
	DOWNLINK	Slot 1 only: TCH, Slots 2 to 4: Burst off, TCH: PN9 data allocated to adjacent TCH area
	PN9	PN9 bit sequence $\pi/4$ DQPSK modulation
	PN15	PN15 bit sequence $\pi/4$ DQPSK modulation
RF signal	Frequency range	10 to 3000 MHz
	Output level	-143 to +13 dBm
	Level accuracy	Within ± 1.0 dB ($\leq +5$ dBm) compared with CW output level [At modulation data PN9/PN15]
	Vector error	≤ 1.8 % (rms) *At output of +5 dBm, 100 to 2100 MHz, 18° to 35 °C
	Adjacent channel leakage power	At output of +5 dBm, PLL mode: narrow, 100 to 1000 MHz and 1750 to 2500 MHz, RBW: 3 kHz, VBW: 10 kHz ≤ -66 dBc (600 kHz offset, BW: 192 kHz), -69 dBc (900 kHz offset, BW: 192 kHz) [At modulation data PN9/PN15] Excluding performance deterioration due to spurious emission of MG3681A main frame.
Burst On/Off ratio	≥ 65 dB (+5 dBm) [At modulation data UPLINK/DOWNLINK]	
IQ signal	Output level	$\sqrt{I^2 + Q^2} = 359$ mV (rms)
	Transmit speed	192 ksps
Transmit speed	Transmit speed accuracy	Depends on basic signal accuracy of MG3681A (except for the case of external synchronization).
	Firmware backup space	CPU: 137.3 kbyte, FPGA: 49.5 kbyte (within MU368030A Universal Modulation Unit)

Ordering Information

Please specify the model, name and quantity when ordering.

Model/Order No.	Name
MG3681A*1	Main frame Digital Modulation Signal Generator
MU368030A*2	Expansion unit Universal Modulation Unit
MX368035A	Software PHS Signal Generation Software*3
W2167AE	Standard accessories MX368035A operation manual: 1 copy

*1: Refer to catalogue for MG3681A.

*2: Refer to catalogue MU368010A/MU368040A/MU368030A for MU368030A.

*3: Supplied with Compact Flash memory card*4 (with adapter) or ATA flash memory card.

*4: CompactFlash™ is a trademark of SanDisk Corporation.



Specifications are subject to change without notice.

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