

How to use the LabVIEW drivers for the Rohde & Schwarz CMU 300 Universal Radio Communication Tester

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CMU 300 Instrument Drivers

The instrument driver suite for CMU 300 currently consists of several instrument drivers.

Instrument Driver	Supported Instrument Options	Standard
RSCMU200		RF Non-Signalling, Audio
RSCMU300	For compatibility and RSCMUK3G	RF Non-Signalling, Audio
RSCMUK3G	K30, K31, K32, K33, K41	GSM BS

All RSCMUKxx instrument drivers can only be installed and used when RSCMU300 driver module is installed on the system. This applies to every development system and application that will make calls to these drivers.

CMU 300 Function Groups

Each function group on the instrument represents a separate VISA session to the instrument. The following table shows initialize and close functions that should be used to initialize and close each currently supported function group.

Function Group	Initialize Function	Close Function
RSCMU200/RSCMU300		
RSCMU_BASE	RSCMU_Init_Base	RSCMU_Close_Base
RSCMU_RF_NSIG	RSCMU_Init_RF_NSig	RSCMU_Close_RF_NSig
RSCMU_AUDIO_NSIG	RSCMU_Init_Audio_NSig	RSCMU_Close_Audio_NSig
RSCMU300		
	For compatibility and RSCMUK3G only	
RSCMU300_BASE	RSCMU300_Init_Base	RSCMU300_Close_Base
RSCMU300_RF_NSIG	RSCMU300_Init_RF_NSig	RSCMU300_Close_RF_NSig
RSCMU300_AUDIO_NSIG	RSCMU300_Init_Audio_NSig	RSCMU300_Close_Audio_NSig
RSCMUK3G		
RSCMU300_GSM400BS_NSIG	RSCMU300_Init_GSM_NSig	RSCMU300_Close_GSM_NSig
RSCMU300_GSM400BS_SIG	RSCMU300_Init_GSM_Sig	RSCMU300_Close_GSM_Sig
RSCMU300_GSM850BS_NSIG	RSCMU300_Init_GSM_NSig	RSCMU300_Close_GSM_NSig
RSCMU300_GSM850BS_SIG	RSCMU300_Init_GSM_Sig	RSCMU300_Close_GSM_Sig
RSCMU300_GSM900BS_NSIG	RSCMU300_Init_GSM_NSig	RSCMU300_Close_GSM_NSig
RSCMU300_GSM900BS_SIG	RSCMU300_Init_GSM_Sig	RSCMU300_Close_GSM_Sig
RSCMU300_GSM1800BS_NSIG	RSCMU300_Init_GSM_NSig	RSCMU300_Close_GSM_NSig
RSCMU300_GSM1800BS_SIG	RSCMU300_Init_GSM_Sig	RSCMU300_Close_GSM_Sig
RSCMU300_GSM1900BS_NSIG	RSCMU300_Init_GSM_NSig	RSCMU300_Close_GSM_NSig
RSCMU300_GSM1900BS_SIG	RSCMU300_Init_GSM_Sig	RSCMU300_Close_GSM_Sig
RSCMUNB		
RSCMU_NB_NSig	RSCMU_NB_Init_NB_NSig Parameter: WCDMA1900NBFDN_NSig	RSCMU_NB_Close_NB_NSig

For more information regarding the CMU 300 VXIPnP instrument drivers, please read the readme.txt file that comes with each driver.

RSCMUK3G driver

Please use the RSCMU300 Base driver.

It is necessary to install the CMU200/CMU300 VXIPnP driver first.

LabVIEW installation of CMU 300 Instrument Drivers

The installation of the CMU modules follow the rules of the VXIPnP consortium.

LabVIEW has to know how to find the driver llb.

You have to define the custom directory Vxipnp\gwinNT\rscmu200 (Win NT) for the

CMU200\CMU300 base driver.

The best way is to copy this directory to the LabVIEW\instr.lib directory.

This is the standard directory and you have not to define anything else.

Please copy:

Vxipnp\gwinNT\rscmu200 (Win NT) directory to the LabVIEW\instr.lib directory

or

Vxipnp\gwin95\rscmu200 (95/98) directory to the LabVIEW\instr.lib directory

You have to do the same for other CMU modules.

For GSM:

Vxipnp\gwinNT\rscmuk3g (Win NT) directory to the LabVIEW\instr.lib directory

or

Vxipnp\gwin95\rscmuk3g (95/98) directory to the LabVIEW\instr.lib directory

Driver for other LabVIEW Versions

LabVIEW 8.2 and higher

Please use the LabVIEW 8.2 driver.

CMU 300 Instrument Drivers Improved Help System

Newly updated and released instrument drivers are equipped with help file in compressed html format (the name of the file is prefix.chm, where prefix is prefix of the instrument driver). In LabVIEW 6.1 if you will show the on-line help (by pressing the Ctrl+H key sequence) you can see in the help window statement 'Click here for more help'. After pressing the link the help file will be opened with the position in the file updated.

In previous versions of LabVIEW this feature does not work, but the help file is accessible as a standalone chm file in the installation directory of instrument driver (for example C:\VXIPNP\GWINNT\RSCMU200\RSCMU200.CHM).

Additional Information

For more information regarding the CMU 200 VXIPnP instrument drivers, please read the readme.txt file that comes with each driver.