

Changes with N7700A version 1.2.3						
PolNav	Base	IL	IL/PDL	PolCon	Type	Item
			x		New	Introduced support for 81610A/81613A Return Loss Modules. This allows for simultaneous acquisition of single channel polarization-averaged return loss data during an IL/PDL measurement sweep.
			x		New	Introduced support for 81610A/81613A Return Loss Modules. This allows for simultaneous acquisition of single channel return loss data during IL/PDL measurement sweep.
			x		New	Introduced support for special N7745A-E01 power meters with photocurrent inputs. This allows for characterizing photodetectors and receiver modules using the IL/PDL engine. Adjustable bias voltages are supported as well.
	x		x		New	Introduced COM automation interface for controlling measurement engine and OMR file handling from your preferred environment, such as e.g. VEE, LabView, Matlab, Visual Basic, C++.
	x				New	Introduced COM automation interface for N778xB instrument control from your preferred environment, such as e.g. VEE, LabView, Matlab, Visual Basic, C++.
			x		New	Added ability to save and load reference files by filename instead of selecting generic names from drop-down list.
x					New	PER application now allows for selecting different TCU temperature profiles to suit different types of PM fibers.
x					New	Improved PER application for fibers with lower temperature sensitivity by also using temperature range below room temperature
	x				Impr	Excel export includes column headers now.
			x		Fix	With power meter autoranging turned off no over-/underrange warnings have been shown before. This has been fixed.
x					Fix	Under rare circumstances, the log file could get very large. It is now limited to a maximum size of 10MB.
	x	x	x	x	Fix	Certain operations did fail or could cause abnormal program termination on double-byte character operating systems such as Japanese Windows when using certain language specific characters in file names.
			x		New	Automatic reference port detection has been added for handling multiple ports, e.g. using splitter outputs connected to one or multiple power meters during reference sweeps.
x					Fix	In previous versions no pbin file could be added to running PolarizationNavigator by double clicking / executing from an explorer window. This has been fixed.
			x		Impr	Measurement evaluation now takes into account wavelength dependent responsivity data stored on the power meters used. This will improve IL accuracy if a single port reference measurement is used as a reference for a multi-port DUT measurement.
			x		Impr	Improved timing between SOP switching and power meter sampling to remove a contribution to PDL uncertainty that was approximately 10-15% x PDL.
	x		x		New	Added Matlab and LabView examples for COM automation interfaces.
			x		New	Added Input port auto detection for optical switch in Multi-TLS engines.
	x				Impr	Hide-High-Loss-Data operation is applied to most traces now instead of just to IL and PDL trace.
	x				Impr	Additional data such as file name and trace name is shown in trace tooltips now in addition to channel numbers.
			x		Impr	TLS output can be turned on and off from user interface now.
			x		Impr	TLS output state is indicated in the user interface now.
			x		Impr	When loading an agconfig file with an identical hardware configuration from within an active engine, only software settings, such as measurement parameters are applied now. This avoids time consuming engine deactivation and reactivation procedure.
	x	x	x	x	Fix	Trying to overwrite an OMR file that is open in another engine, through an automation interface or in FileViewer will no longer cause abnormal program termination.
		x	x	x	Impr	Configuration Wizard now lists instrument serial numbers in addition to interface ID, such as GPIB address.
		x	x	x	Fix	Saving a measurement from an active engine did not update the file name in the browser tree or the list of most recently used files in the file menu under certain conditions. This has been fixed.
			x		Fix	Fixed an issue that could get the application locked up, if engine activation failed and user immediately ran Configuration Wizard from file menu.
	x				Impr	Graph marker delta display will now toggle between THz/GHz or nm/pm if markers are moved close together or far apart.
	x				Fix	Disk Serial Number in Launch Pad now shows leading zeros.
x	x				Impr	Agilent N778xB Polarization Solutions User's Guide is part of the PAS base package instead of the PolarizationNavigator package now.

x	x				Impr	PolarizationNavigator and other PAS engines will use the same N778xB firmware file now instead of providing their own.
			x		Impr	Engine now checks for matching sweep rates of reference sweep and DUT sweep.
		x	x	x	Impr	Engine version number is now stored in agconfig files.
	x				Fix	Bandwidth column header of DWDM analysis output is no longer rounded to integer values.
x					Impr	Stepped PMD application will now use additional wavelength steps at the beginning of the wavelength range that have been skipped before.
x					Impr	N774x Viewer is no longer part of the PolarizationNavigator install package.
			x		Impr	Engine now checks for matching lambda logging settings of reference sweep and DUT sweep.
	x				Impr	Launch pad now allows for copying the Photonic Application Suite log file to the desktop for easy access (note that the PolarizationNavigator uses it's own log file and already provides a similar operation).
			x		Impr	Moved some controls to different tabs in user interface.
			x		Fix	0.15pm step size did appear rounded to 0.2pm in reference description box. This has been fixed.
			x		Fix	Improved power meter autoranging, that could have caused unnecessary range changes under very rare circumstances before.
		x			Fix	If a timeout occurred during a measurement (e.g. due to TLS settling operation), a subsequent measurement result was not displayed. This has been fixed.
			x		Fix	Under very rare circumstances, a zero-bytes sized reference file could be created which would cause abnormal program termination on subsequent engine activations. This has been fixed.
x					Impr	Cosmetic (changes well below specified uncertainty) improvement to determination of smoothed DGD points at start of trace
			x		Fix	Fixed an issue that could cause the first measurement after engine activation to be invalid in very rare cases.
	x				Impr	Introduced new N778xB instrument firmware for supporting future hardware modules.
x	x	x	x	x	Both	Many improvements and minor bugfixes.