There are 30 plug-in modules including multiplexer, RF multiplexer, fiber-optical multiplexer, general-purpose relay, matrix, digital input/output, Form-C, breadboard, multifunction modules. Please refer following table for plug-in module selection.

Plug-in Module Selection Table

Module	Description Description	Max. Voltage	Max. Current per Chan.	Initial Closed Channel Resistance	Thermal Offset per Chan.	Bandwidth	Connection Type	Relay Cycle Counter
Multiplexe	er Modules							
N2260A	40-channel	200V	1A	<1 Ω	<3µV	10MHz	T or C	Yes
N2266A	40-channel	200V	0.5A	<1 Ω	<50µV	40MHz	T or C	Yes
N2270A	10-channel	1000V	1A	<1 Ω	<200µV	5 MHz	Crimp & Insert	Yes
44470A	10-channel	250V	2A	<1 Ω	<3µV	10MHz	T	
44470D	20-channel	250V	2A	<1 Ω	<3µV	10MHz	T	
General-p	urpose Relay Mo	dules						
N2261A	40-channel	200V	1A	<0.5 Ω	<3µV	10MHz	T or C	Yes
N2267A	8-channel	250V	8A	<0.08 Ω	<3µV	20MHz	Crimp & Insert	Yes
44471A	10-channel	250V	2A	<1 Ω	<3µV	10MHz	T	
44471D	20-channel	250V	1A	<1Ω	<3µV	10MHz	T	
44477A	7-channel	250V	2A	<1 Ω	<3µV	10MHz	Т	
Matrix Mo	*		-					
N2262A	4 x 8 matrix	200V	1A	<1 Ω	<3µV	10MHz	T or C	Yes
44473A	4 x 4 matrix	250V	2A	<1 Ω	<3µV	10MHz	T	
Digital I/C		2001	2.11	VI 88	ι νομν	TOTVITE	' '	
N2263A	32-bit TTL	42V	0.6A	NA	NA	NA	T or C	
44474 A	16-bit TTL	30V	0.125A	NA	NA NA	NA	T	
	tion Modules	30 V	0.123A	IVA	I IVA	INA		
N2264A	12 GP	200V	1A	<0.5 Ω	<3μV	10MHz	T or C	Yes
N2204A	3 GP	125V	5A	<0.3 Ω	<3μV	10MHz	T or C	Yes
	16-bit DIO	42V	0.6A	NA	NA	NA NA	T or C	162
NICOLEA								Voc
N2265A	4 x 4 matrix	200V	1A	<1 Ω	<3µV	10MHz	T or C	Yes
	16-bit DIO	42V	0.6A	NA NA	NA NA	NA	T or C	
N2269A	2 DAC 16-bit DIO	12V TTL-compatible	10mA NA	NA NA	NA NA	NA NA	T or C T or C	
	eneral-purpose, DIO =	Digital I/O, T = Termin						
Modules	Description	Insertion loss	Stability	Repeatability	Wavelength	Connector	Switching Time	
NICOCC		111261 (1011 1022			wavelengui	Connection	Switching rime	
N2280A	Quad 1 x 2			· · · · · · · · · · · · · · · · · · ·				
	Quad 1 x 2	0.5 dB	± 0.03dB	± 0.005dB	1310/1550 nm	SC/APC	15 ms	
N2281A	Dual 1 x 4	0.5 dB 0.5 dB	± 0.03dB ± 0.03dB	± 0.005dB ± 0.0065dB	1310/1550 nm 1310/1550 nm	SC/APC SC/APC	15 ms 20 ms	
N2281A N2282A	Dual 1 x 4 Single 1 x 8	0.5 dB	± 0.03dB	± 0.005dB	1310/1550 nm	SC/APC	15 ms	
N2281A N2282A	Dual 1 x 4 Single 1 x 8 owave Modules	0.5 dB 0.5 dB	± 0.03dB ± 0.03dB ± 0.02dB	± 0.005dB ± 0.0065dB	1310/1550 nm 1310/1550 nm	SC/APC SC/APC	15 ms 20 ms	
N2281A N2282A	Dual 1 x 4 Single 1 x 8	0.5 dB 0.5 dB	± 0.03dB ± 0.03dB	± 0.005dB ± 0.0065dB	1310/1550 nm 1310/1550 nm	SC/APC SC/APC	15 ms 20 ms	
N2281A N2282A RF & Micr	Dual 1 x 4 Single 1 x 8 owave Modules	0.5 dB 0.5 dB 0.5 dB	± 0.03dB ± 0.03dB ± 0.02dB	± 0.005dB ± 0.0065dB ± 0.005/0.01dB	1310/1550 nm 1310/1550 nm 1270/1670 nm	SC/APC SC/APC SC/APC	15 ms 20 ms 250 ms	
N2281A N2282A RF & Micro Modules	Dual 1 x 4 Single 1 x 8 owave Modules Description	0.5 dB 0.5 dB 0.5 dB	± 0.03dB ± 0.03dB ± 0.02dB	± 0.005dB ± 0.0065dB ± 0.005/0.01dB	1310/1550 nm 1310/1550 nm 1270/1670 nm Bandwidth	SC/APC SC/APC SC/APC	15 ms 20 ms 250 ms Connector	
N2281A N2282A RF & Micri Modules N2268A N2272A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9	0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20	1310/1550 nm 1310/1550 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz	$ \begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \textbf{Impedance} \\ \\ \hline \\ 50~\Omega \\ \\ \end{array} $	15 ms 20 ms 250 ms Connector SMA BNC	
N2281A N2282A RF & Micr Modules N2268A	Dual 1 x 4 Single 1 x 8 cowave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6	0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.36dB <0.36dB	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20	1310/1550 nm 1310/1550 nm 1270/1670 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz	SC/APC SC/APC SC/APC Impedance 50 Ω	15 ms 20 ms 250 ms Connector SMA	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can	0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.36dB support 2 microwa	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20	1310/1550 nm 1310/1550 nm 1270/1670 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz	$ \begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \textbf{Impedance} \\ \\ \hline \\ 50~\Omega \\ \\ \end{array} $	15 ms 20 ms 250 ms Connector SMA BNC	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4	0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.36dB support 2 microwa <0.75dB	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 ical specs depend on the m	1310/1550 nm 1310/1550 nm 1270/1670 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{Impedance} \\ \\ \hline \\ 50~\Omega \\ \\ \hline \\ 50~\Omega \\ \\ \\ \end{array}$	15 ms 20 ms 250 ms Connector SMA BNC SMA	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4	0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.36dB <0.36dB support 2 microwa <0.75dB <1.1dB	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35	1310/1550 nm 1310/1550 nm 1270/1670 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{Impedance} \\ \\ \hline \\ 50~\Omega \\ \\ \hline \\ 50~\Omega \\ \\ \\ \hline \\ \\ 50~\Omega \\ \\ \\ \end{array}$	15 ms 20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC SMA	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478A 44478B	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Dual 1 x 4	0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.36dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB <-70dB	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35	1310/1550 nm 1310/1550 nm 1270/1670 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \text{SC/APC} \\ \\ \hline \\ \text{SD } \Omega \\ \\ \hline \\ \text{50 } \Omega \\ \\ \hline \\ \text{50 } \Omega \\ \\ \\ \hline \\ \text{50 } \Omega \\ \\ \\ \\ \text{75 } \Omega \\ \\ \\ \end{array}$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478A 44478B 44476A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Triple 1 x 2	0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.36dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB <0.25dB	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB eve switches. Techn <-85dB <-70dB <-70dB <-90dB	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35 <1.15	1310/1550 nm 1310/1550 nm 1270/1670 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{Impedance} \\ \\ \hline \\ 50~\Omega \\ \\ \hline \\ 50~\Omega \\ \\ \\ \hline \\ \\ 50~\Omega \\ \\ \\ \end{array}$	15 ms 20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC SMA	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478A 44478B 44476A 44476B	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can	0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.36dB <0.36dB support 2 microwa <1.1dB <1.1dB <0.25dB support 2 microwa	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB eve switches. Techn <-85dB <-70dB <-70dB <-90dB	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35	1310/1550 nm 1310/1550 nm 1270/1670 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \text{SC/APC} \\ \\ \hline \\ \text{SD } \Omega \\ \\ \hline \\ \text{50 } \Omega \\ \\ \hline \\ \text{50 } \Omega \\ \\ \\ \hline \\ \text{50 } \Omega \\ \\ \\ \\ \text{75 } \Omega \\ \\ \\ \end{array}$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478A 44478B 44476B Module Con	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can nection Accessor	0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.36dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB <0.25dB support 2 microwa ries	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB <-70dB <-90dB ve switches. Techn	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 <1.20 <1.12 <1.35 <1.35 <1.35 <1.15 ical specs depend on the m	1310/1550 nm 1310/1550 nm 1270/1670 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz ounted relays.	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{SO} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478A 44478B 44476A 44476B Module Con	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can Relay driver can	0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.36dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB <0.25dB support 2 microwa conserved by the conserve	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB <-70dB <-90dB ve switches. Techn	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 <1.20 <1.12 <1.35 <1.35 <1.15 ical specs depend on the m	1310/1550 nm 1310/1550 nm 1270/1670 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 1.3 GHz ounted relays.	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{SO} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micri Modules N2268A N2272A N2276A N2276B 44472A 44478A 44478B 44476A 44476B Module Con 12290A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can snection Accessor	0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.5dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB <0.25dB support 2 microwa co.75dB	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB <-70dB <-90dB ve switches. Techn	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35 <1.15 ical specs depend on the m N2295A Screw ten N2329A Screw ten	1310/1550 nm 1310/1550 nm 1310/1550 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz ounted relays.	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{SO} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478A 44478B 44476A 44476B Module Con 12290A 12291A 12292A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can sinection Accessor Screw terminal blo Screw terminal blo Screw terminal blo	0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.5dB <0.5dB <0.75dB <1.1dB <1.1dB <1.1dB <0.25dB support 2 microwa uries ck for N2260A, Nick for N2261A ck for N2262A	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB <-70dB <-90dB ve switches. Techn	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35 <1.15 ical specs depend on the m N2295A Screw ten N2329A Screw ten N2327A Crimp & Ir	1310/1550 nm 1310/1550 nm 1310/1550 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz ounted relays.	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{SO} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \end{array}$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478B 44476A 44476B Module Con 12290A 12291A 12292A 12293A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can rection Accessor Screw terminal blo	0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB <0.25dB support 2 microwa ries ck for N2260A, Nack for N2261A ck for N2262A ck for N2263A	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB <-70dB <-90dB ve switches. Techn	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35 <1.15 ical specs depend on the m N2295A Screw ten N2329A Screw ten N2327A Crimp & Ir	1310/1550 nm 1310/1550 nm 1310/1550 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz ounted relays.	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{SO} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \end{array}$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478A 44478B 44476A 44476B Module Con 12290A 12291A 12292A 12293A 12294A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can screw terminal blo	0.5 dB 0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB <0.25dB support 2 microwa ries ck for N2260A, Nack for N2261A ck for N2262A ck for N2263A ck for N2264A	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB <-70dB <-90dB ave switches. Techn	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35 <1.15 ical specs depend on the m N2295A Screw ten N2329A Screw ten N2327A Crimp & Ir	1310/1550 nm 1310/1550 nm 1310/1550 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz ounted relays.	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{SO} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \end{array}$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478B 44476A 44476B Module Con I2290A I2291A I2292A I2293A I2294A I2296A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can screw terminal blo	0.5 dB 0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB <0.25dB support 2 microwa ries ck for N2260A, Nack for N2261A ck for N2262A ck for N2263A ck for N2264A ninal block for N22	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB <-70dB <-90dB ive switches. Techn 2266A	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35 <1.15 ical specs depend on the m N2295A Screw ten N2329A Screw ten N2327A Crimp & Ir N2320A Crimp & Ir	1310/1550 nm 1310/1550 nm 1310/1550 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz ounted relays.	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{SO} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \end{array}$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micr Modules N2268A N2272A N2276A N2276B 44472A 44478A 44476B 44476B Module Con I2290A I2291A I2292A I22924 I2293A I2294A I2296A I2297A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can rection Accessor Screw terminal blo	0.5 dB 0.5 dB 0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.36dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB <0.25dB support 2 microwa ries ck for N2260A, Nack for N2261A ck for N2261A ck for N2263A ck for N2264A ninal block for N22	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB eswitches. Techn <-85dB <-70dB <-70dB <-90dB ve switches. Techn 2266A	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35 <1.15 ical specs depend on the m N2295A Screw ten N2329A Screw ten N2327A Crimp & Ir N2320A Crimp & Ir	1310/1550 nm 1310/1550 nm 1310/1550 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz ounted relays.	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{SO} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \end{array}$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	
N2281A N2282A RF & Micr Modules N2272A N2276A N2276B 44472A 44478A 44476B 44476B Module Con 12290A 12291A 12292A 12292A 12293A 12294A 12296A 12297A 12297A 12298A	Dual 1 x 4 Single 1 x 8 owave Modules Description Dual 1 x 4 Single 1 x 9 Dual 1 x 6 Relay driver can Dual 1 x 4 Dual 1 x 4 Triple 1 x 2 Relay driver can Screw terminal blo Crimp & insert term 1.5 m cable for coi	0.5 dB 0.5 dB 0.5 dB 0.5 dB 0.5 dB 0.5 dB Insertion loss <0.35dB <0.5dB <0.36dB support 2 microwa <0.75dB <1.1dB <1.1dB <0.25dB support 2 microwa ries ck for N2260A, Nack for N2261A ck for N2262A ck for N2263A ck for N2264A ninal block for N2264A	± 0.03dB ± 0.03dB ± 0.02dB Cross talk <-64dB <-75dB <-100dB ve switches. Techn <-85dB <-70dB <-70dB <-90dB ve switches. Techn 2266A	± 0.005dB ± 0.0065dB ± 0.005/0.01dB SWR <1.20 <1.20 <1.20 <1.20 ical specs depend on the m <1.12 <1.35 <1.35 <1.15 ical specs depend on the m N2295A Screw ten N2329A Screw ten N2327A Crimp & Ir N2320A Crimp & Ir	1310/1550 nm 1310/1550 nm 1310/1550 nm 1270/1670 nm Bandwidth 3.5 GHz 1.0 GHz 20 GHz ounted relays. 300 MHz 1.3 GHz 1.3 GHz 18 GHz ounted relays.	$\begin{array}{c} \text{SC/APC} \\ \text{SC/APC} \\ \\ \text{SC/APC} \\ \\ \hline \\ \text{SO} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \hline \\ \text{50} \ \Omega \\ \\ \\ \hline \\ \text{75} \ \Omega \\ \\ \\ \text{50} \ \Omega \\ \\ \\ \end{array}$	20 ms 250 ms Connector SMA BNC SMA BNC SMA BNC BNC BNC BNC BNC	

Ordering Information

Agilent Technologies Products Mainframes

3499A 5-Slot Switch/Control Mainframe, includes hard copy manual and power cord. Plug-in modules are ordered separately and are required for operation.

3499A-0B0 Delete Hard Copy User's Manual **3499A-1CP** Rack Mount Kit with Handles

3499A-1CM Rack Mount Kit

3499A-0B1 Add additional User's Manual

3499B 2-Slot Switch/Control Mainframe, includes hard copy manual and power cord. Plug-in modules are ordered separately and are required for operation.

3499B-0B0 Delete Hard Copy User's Manual **3499B-1CM** Rack Mount Kit with half-rack filler panel

3499B-0B1 Add additional User's Manual

3499C 9/14-Slot Switch/Control Mainframe. User's manual is not included. Must order 3499C-0B1 for hardcopy of the User's Manual. Plug-in modules are ordered separately and are required for operation.

3499C-0B1 Hardcopy of User's Manual For rackmount kit w/o handles, order the Agilent standard cabinet accessory 5063-9216

For rackmount kit with handles, order the Agilent standard cabinet accessory 5063-9223.

Mainframe Filler Panels

3499C-FP1 1-slot width filler panel for 3499A/B/C mainframes

3499C-FP2 2-slot width filler panel for 3499A/B/C mainframes

Plug-in modules, screw terminal blocks NOT included

N2260A 40-channel Multiplexer Module

N2261A 40-channel General Purpose Relay Module

N2262A 4 x 8 Matrix Module

N2263A 32-bit Digital I/O Module

N2264A 12 + 3 GP + 16-bit Digital I/O Module

N2265A 4 x 4 Matrix + 16-bit Digital I/O Module

N2266A 40-channel High-speed Multiplexer Module

N2267A 8-channel 8 A General Purpose Relay Module

N2268A Dual 1 x 4 RF (3.5 GHz) Multiplexer Module

N2269A 32-bit Optical Isolated DIO + 2 DACs Module

N2270A 10-channel 1000 V Multiplexer Module N2272A 1 x 9 RF (1GHz) Multiplexer Module N2276A Dual 1 x 6 Microwave Multiplexer Module

N2276A-204 Dual 1 x 4 Multiplexer

N2276A-206 Dual 1 x 6 Multiplexer

N2276B Microwave Multiplexer Driver Module

N2280A Quad Optical 1 x 2 Multiplexer Module, SC/APC

N2281A Dual Optical 1 x 4 Multiplexer Module, SC/APC

N2282A 1 x 8 Optical Multiplexer Module, SC/APC N2289A Mini-DIN-to-D9 cable for built-in DIO in 3499A/B

N2290A Screw terminal block for N2260A and N2266A

N2291A Screw terminal block for N2261A

N2292A Screw terminal block for N2262A

N2293A Screw terminal block for N2263A

N2294A Screw terminal block for N2264A

N2295A Screw terminal block for N2265A

N2296A Crimp & Insert terminal block for N2260-5A

N2297A DIN96-to-Twin-D50 cable for N2260-5A

N2298A DIN96-to-D25 cable for N2262A

N2299A DIN96-to-Quad-D25 cable for N2260-5A

N2320A Crimp & Insert Connection kit for N2270A

N2327A Crimp & Insert Connection kit for N2267A

N2329A Screw Connection Kit for N2269A

Plug-in modules (Agilent 3488A family), screw terminal blocks included

44470A 10-channel Relay Multiplexer Module

44470D 20-channel Relay Multiplexer Module

44471A 10-channel GP Relay Module

44471D 20-channel GP Relay Module

44472A Dual 1 x 4 RF (300MHz) Multiplexer Module (50 Ω)

44473A 4x4 Matrix Switch Module

44474A 16-bit Digital I/O Module

44475A Breadboard Module

44476A Microwave Multiplexer Module

44476B Microwave Switch Driver Module

44477A 7-channel Form-C Relay Module

44478A Dual 1x4 RF (1.3 GHz) Multiplexer (50 Ω)

44478B Dual 1x4 RF (1.3 GHz) Multiplexer (75 Ω)

44480A Connector Kit for 44470A

44480B Connector Kit for 44470D

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Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: "Our Promise" and "Your Advantage."

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