

PremTest Product Catalog

Youth Electronics
Solutions for Connection



Youth Electronics

The Company

YOUTH ELECTRONICS

Youth Electronics focuses on optimizing customer's connectivity network on RF/Microwave, optical and power connection. We provides complete product portfolio for DAS, interconnect product for Microwave and Test systems.

Our company locates in East China. Our office in Ningbo focus on R&D, Sales and supporting function. Cable plant in Hangzhou and Assembly plant in Ningbo focus on manufacturing and quality.



Office: Ningbo, China

Assembly plant: Ningbo, China

Braiding cable & Corrugated cable plant: Hangzhou, China



Product Series

LoPim™ series – Low PIM Antenna™, cable, jumper, connector and passive components

YLB™ series – Series of braiding LMR alternative cables and connectors

HiONE™ series – Optical & Power connectivity products

PremTest™ series – High precision RF/MW test cable assemblies and adaptors

Quality

Good design, powerful manufacturing, assembly and performance test capability, complete quality control system form Youth's core competitiveness. Our quality procedure is approved by ISO9001.

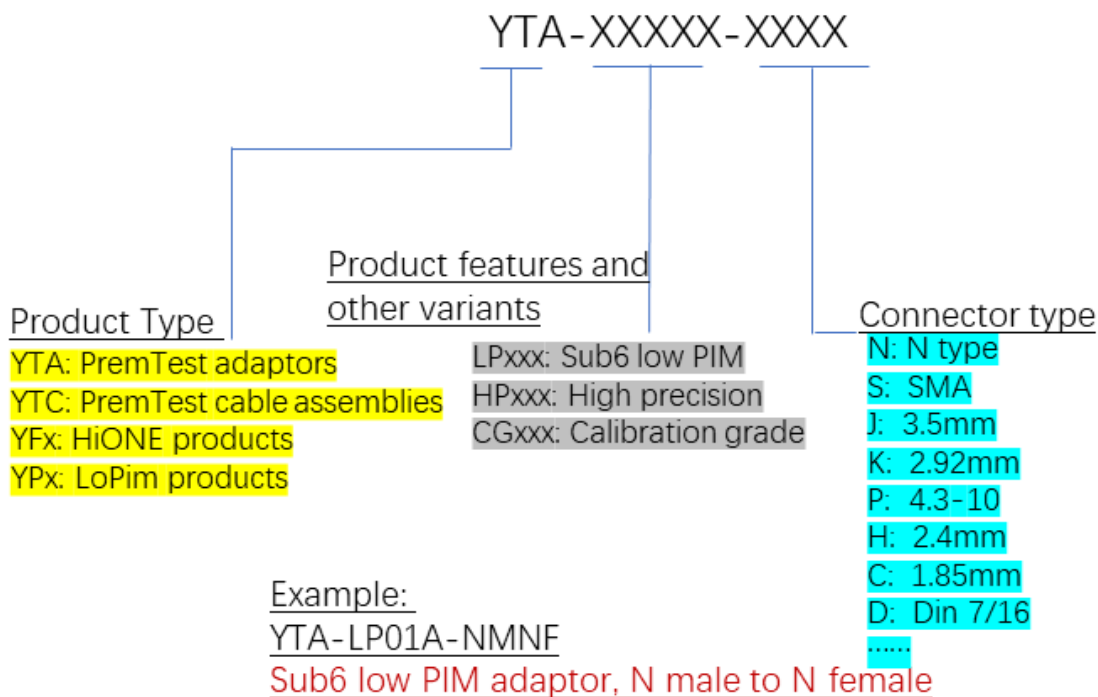
Recognize the social and economic importance of environmental protection and action has been taken to meet the requirements of the RoHS Directive.

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PremTest Adaptors Part Number Nomenclature



PremTest™ High Precision Test Adaptors

Application

- Lab test for Microwave/RF components/system
- Field test for Microwave/RF components/system



Construction & Characteristics	Description
Male contact	Stainless Steel, Passivated
Female contact	Beryllium copper, Glod plating
Body and Outer Contacts	Stainless Steel, Passivated
Insulator	PEI
Gasket	Silicone rubber (weatherproof), ZZ-R-75
Impedance(Ohm)	50
Frequency range(GHz)	DC-67GHz
VSWR	See product data sheet
Operation temperature (°C)	-55~+150

Product ordering guide

Type	Type N M	Type N F	SMA M	SMA F	3.5mm M	3.5mm F	2.92 mm M	2.92 mm F	2.4 mm M	2.4 mm F
Type N M	S									
Type N F	A	S								
SMA M	A	A	A							
SMA F	A	S	S	S						
3.5mm M	S	A	A	A	S					
3.5mm F	A	S	A	S	A	S				
2.92mm M	A	A	A	A	S	A	S			
2.92mm F	A	A	S	S	A	S	S	S		
2.4mm M	NA	NA	A	A	A	A	S	A	S	
2.4mm F	NA	NA	A	A	A	A	A	S	S	S

Note:

NA: Not available

A: Available. No stock

S: In stock

PremTest™ Calibration Grade Test Adaptors

PremTest™ Calibration Grade Test Adaptors are designed for Vector Network Analyzer calibration. It meet calibration grade precision.



Construction & Characteristics	Description
Male contact	Stainless Steel, Passivated
Female contact	Beryllium copper, Glod plating
Body and Outer Contacts	Stainless Steel, Passivated
Insulator	PEI
Gasket	Silicone rubber (weatherproof), ZZ-R-75
Impedance(Ohm)	50
Frequency range(GHz)	DC-67GHz
VSWR	See product data sheet
Operation temperature (°C)	-55~+150

Product ordering guide

Type	Type N M	Type N F	3.5m m M	3.5m m F	2.92 mm M	2.92 mm F	2.4 mm M	2.4 mm F	1.85 mm M	1.85 mm F
Type N M	A									
Type N F	A	A								
3.5mm M	A	A	A							
3.5mm F	A	A	A	A						
2.92 mm M	A	A	A	A	A					
2.92 mm F	A	A	A	A	A	A				
2.4 mm M	NA	NA	A	A	A	A	A			
2.4 mm F	NA	NA	A	A	A	A	A	A		
1.85 mm M	NA	NA	A	A	A	A	A	A	A	
1.85 mm F	NA	NA	A	A	A	A	A	A	A	A

Note:

NA: Not available

A: Available. No stock

S: In stock

PremTest™ Low PIM Sub-6GHz Test Adaptors

Application

- Antenna and Feeder system test
- In cabinet system test
- Indoor DAS test
- Connection between RF/MW components



Construction & Characteristics	Description
Male contact	Brass, tri-metal plating
Female contact	Bronze or Beryllium copper, silver plating
Body and Outer Contacts	Brass, tri-metal plating
Insulator	PTFE per ASTM-D1457
Gasket	Silicone rubber (weatherproof), ZZ-R-75
Package	Single
Impedance(Ohm)	50
Mating Life	500
Frequency range(GHz)	DC-6GHz
3rd order Inter-Modulation Distortion	-165 dBc typical (+43 dBm carriers)
VSWR	<1.25
Operation temperature (°C)	-55~+150

Product ordering guide

Type	Din 7/16 M	Din 7/16 F	4.3-10 M	4.3-10 F	Type N M	Type N F	Nex10 M	Nex10 F
Din 7/16 M	A							
Din 7/16 F	NA	A						
4.3-10 M	A	A	A					
4.3-10 F	A	S	S	S				
Type N M	A	A	A	A	A			
Type N F	A	S	S	S	A	S		
Nex10 M	A	A	S	S	S	S	S	
Nex10 F	NA	S	S	S	S	S	A	S

Note:

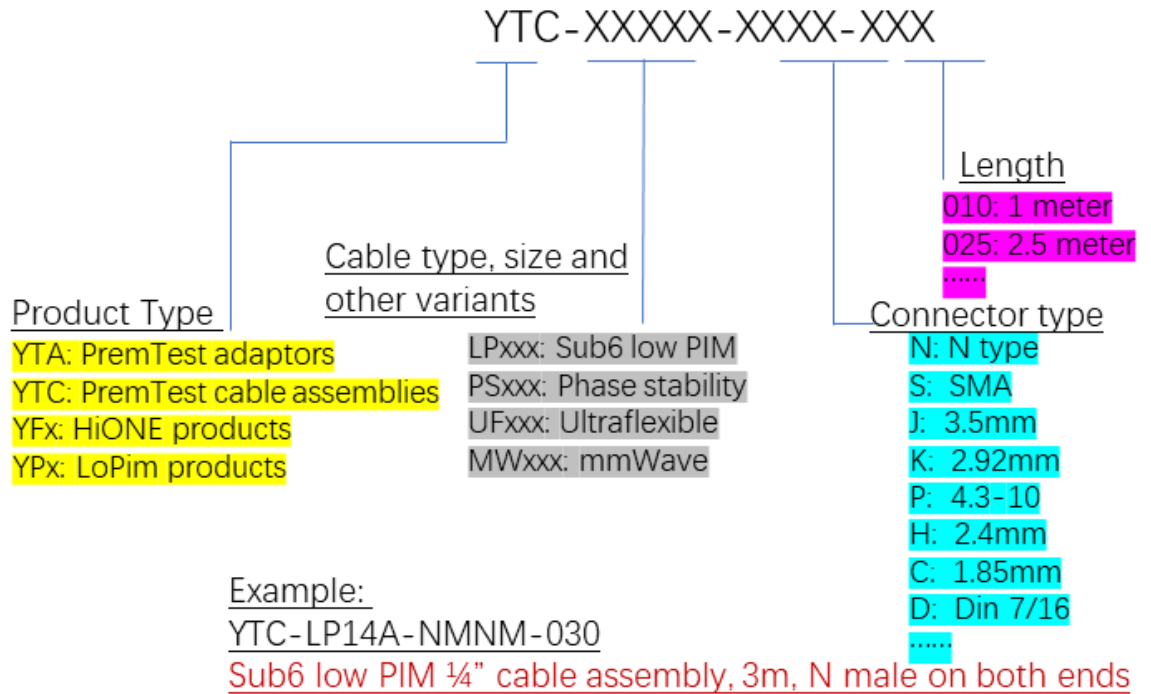
NA: Not available

A: Available. No stock

S: In stock



PremTest Cable Assemblies Part Number Nomenclature



PremTest™ Amplitude & Phase Stability Test Cable Assemblies

Application

- Lab test for Microwave/RF components/system
- Field test for Microwave/RF components/system
- Vector Network Analyzer



Performance of cable

Cable Part No.	PS16	PS15	PS14
Construction			
Inner conductor	Silver Plated Copper		
Dielectric	PTFE		
Outer conductor	SPC tape wrapping		
Inner jacket	FEP		
Protection armor	Spiral stainless steel		
Outer braid	Silver Plated Copper		
Outer tape	Waterproof tape		
Sheath	PTFE		
Electrical Characteristics			
Impedance(Ohm)	50		
Operation frequency(GHz)	67	50	40
Capacity(pF/m)	90	90	80
Velocity(%)	74%	74%	83%
Screening effectiveness(dB@1GHz)	90	90	90
Phase Stability VS temp. @-40~85℃(ppm)	<750	<750	<750
Phase Stability VS bending(degree@18GHz)	+/-4°	+/-4°	+/-4°
Mechanical Characteristics			
Single bending radius(mm)	23	30	32.5
Multiple bending radius(mm)	47	60	65
Weight(g/m)	60	92	97
Outer diameter(mm)	4.7	6.0	6.5
Environmental Characteristics			
Operation temperature (°C)	-40~+85	-40~+85	-40~+85

PremTest™ Amplitude & Phase Stability Test Cable Assemblies

Attenuation and Power rating

Parameter	Attenuation (typ. dB/100m)							Power rating(W @ amb. 40°C)						
	3	6	10	18	40	50	67	3	6	10	18	40	50	67
PS16	1.11	1.60	2.10	2.88	4.48	5.08	6.01	155	108	82	60	39	34	29
PS15	0.77	1.09	1.42	1.92	2.92	3.29		226	159	122	90	59	52	
PS14	0.56	0.80	1.05	1.43	2.21			300	209	160	117	76		

Cable Assembly ordering guide*

PN	Cable Type	Connector A	Connector B	Length (M)	Frequency (GHz)	Insertion loss(dB)	Stock
YTC-PS14A-KMKM-010	PS14	2.92mm M	2.92mm M	1.0	40	2.84	Yes
YTC-PS14A-KMKM-015	PS14	2.92mm M	2.92mm M	1.5	40	3.95	Yes
YTC-PS14A-JMJM-010	PS14	3.5mm M	3.5mm M	1.0	26.5	2.28	Yes
YTC-PS14A-JMJM-015	PS14	3.5mm M	3.5mm M	1.5	26.5	3.16	Yes
YTC-PS15A-HMHM-010	PS15	2.4mm M	2.4mm M	1.0	50	4.00	Yes
YTC-PS15A-HMHM-015	PS15	2.4mm M	2.4mm M	1.5	50	5.65	Yes
YTC-PS15A-KMKM-010	PS15	2.92mm M	2.92mm M	1.0	40	3.56	Yes
YTC-PS15A-KMKM-015	PS15	2.92mm M	2.92mm M	1.5	40	5.02	Yes
YTC-PS16A-CMCM-010	PS16	1.85mm M	1.85mm M	1.0	67	6.83	No
YTC-PS16A-CMCM-015	PS16	1.85mm M	1.85mm M	1.5	67	9.84	No
YTC-PS16A-HMHM-010	PS16	2.4mm M	2.4mm M	1.0	50	5.79	No
YTC-PS16A-HMHM-015	PS16	2.4mm M	2.4mm M	1.5	50	6.04	No

*: For combination of other different connector interface and different length please contact us.

PremTest™ Low PIM Sub-6GHz Test Cable Assemblies

Application

- Antenna and Feeder system test
- In cabinet system test
- Indoor DAS test
- Connection between RF/MW components



Performance of cable

Cable Part No.	LP14C	LP12C	LP38B
Construction			
Inner conductor	Copper Clad Aluminum	Copper Clad Aluminum	Copper Clad Aluminum
Dielectric	Foam PE	Foam PE	Foam PE
Outer conductor	Corrugated Coper	Corrugated Coper	Metal-PE tape+Braid
Jacket	PE	PE	PE
Electrical Characteristics			
Impedance(Ohm)	50		
Operation frequency(GHz)	6	6	6
Capacity(pF/m)	80	80	78
Velocity(%)	83%	83%	85%
Screening effectiveness(dB@1GHz)	120	120	90
3 rd Passive Intermodulation (dBc@2*43dBm)	<-165	<-165	<-163
Mechanical Characteristics			
Single bending radius(mm)	25	25	25
Multiple bending radius(mm)	45	50	50
Weight(g/m)	71	167	87
Outer diameter(mm)	7.7	13.4	10.1
Environmental Characteristics			
Operation temperature (°C)	-40~+85	-40~+85	-40~+85

PremTest™ Low PIM Sub-6GHz Test Cable Assemblies
Attenuation and Power rating

Parameter	Attenuation (typ. dB/100m)							Power rating(KW @ amb. 40°C)						
	824	900	960	2200	3000	3800	6000	824	900	960	2200	3000	3800	6000
LP14C	17.6	18.4	19.1	30.1	35.7	40.9	53.3	0.6	0.5	0.5	0.33	0.28	0.23	0.18
LP12C	9.9	10.3	10.7	16.9	20.1	23.0	30.2	1.0	0.9	0.9	0.58	0.49	0.41	0.32
LP38B	11.7	12.7	13.2	1.43	24.7	28.3	36.9	0.7	0.6	0.6	0.36	0.30	0.27	0.20

Cable Assembly ordering guide*

PN	Cable Type	Connector A	Connector B	Length (M)	Frequency (GHz)	3 rd PIM (dBc)	Stock
YTC- LP14C-XXXM-020	LP14C	Nex10 M	Nex10 M	2.0	6	-165	Yes
YTC- LP14C-XXXF-020	LP14C	Nex10 M	Nex10 F	2.0	6	-165	Yes
YTC- LP14C-NMNM-020	LP14C	N M	N M	2.0	6	-163	Yes
YTC- LP14C-NMNF-020	LP14C	N M	N F	2.0	6	-163	Yes
YTC- LP14C-PMPM-020	LP14C	4.3-10 M	4.3-10 M	2.0	6	-166	Yes
YTC- LP14C-PMPF-020	LP14C	4.3-10 M	4.3-10 F	2.0	6	-166	Yes
YTC- LP14C-DMDM-020	LP14C	Din 7/16 M	Din 7/16 M	2.0	6	-165	Yes
YTC- LP14C-DMDF-020	LP14C	Din 7/16 M	Din 7/16 F	2.0	6	-165	Yes
YTC- LP12C-NMNM-020	LP12C	N M	N M	2.0	6	-163	Yes
YTC- LP12C-NMNF-020	LP12C	N M	N F	2.0	6	-163	Yes
YTC- LP12C-PMPM-020	LP12C	4.3-10 M	4.3-10 M	2.0	6	-166	Yes
YTC- LP12C-PMPF-020	LP12C	4.3-10 M	4.3-10 F	2.0	6	-166	Yes
YTC- LP12C-DMDM-020	LP12C	Din 7/16 M	Din 7/16 M	2.0	6	-165	Yes
YTC- LP12C-DMDF-020	LP12C	Din 7/16 M	Din 7/16 F	2.0	6	-165	Yes
YTC- LP38B-XXXM-020	LP38B	Nex10 M	Nex10 M	2.0	6	-160	No
YTC- LP38B-NMNM-020	LP38B	N M	N M	2.0	6	-160	No
YTC- LP38B-NMNF-020	LP38B	N M	N F	2.0	6	-160	No
YTC- LP38B -PMPM-020	LP38B	4.3-10 M	4.3-10 M	2.0	6	-162	No
YTC- LP38B -PMPF-020	LP38B	4.3-10 M	4.3-10 F	2.0	6	-162	No
YTC- LP38B -DMDM-020	LP38B	Din 7/16 M	Din 7/16 M	2.0	6	-162	No

*: For combination of other different connector interface and different length please contact us.

**Service on line and offline**

➤ Test solution proposal

Our expert team on test are ready to propose complete test solution for actual, precise test result for any specific test requirement, including test scheme, test method, test standard based, test equipment, etc.

➤ Test report

We could do specific test for DUT based on specific test requirement. Complete test report would be shared under the responsibility of accuracy and validity.

Customization

➤ We are well prepared to provide any customization to help our customer on specific project.

Normally response time 3 days for product design and data sheet; 3 weeks for sample and test result.

Anything we would like to get more information regarding test, please visit our website or contact us through

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