

RF Switches

- Coaxial RF-Switches
- Stock models
- Customized RF-Switching Units



Telemeter Electronic

Thermal Management

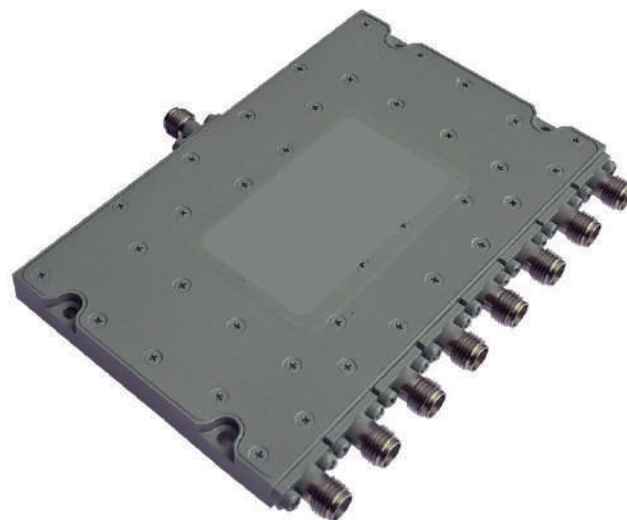
Industrial Components

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COAXIAL RF-SWITCHES



Nowadays, electro-mechanical RF-Switches are the best choice to distribute RF signals with outstanding quality. For demanding applications, many standard models from transfer switches and SP2T to multiple position switches (up to SP18T with 18 switching positions) are available, mostly from stock or with short delivery times in numerous configurations. The switches cover a wide frequency range from DC to 40 GHz.

Highlights:

- Customized housing designs
- Extended temperature range option
- Comparatively small purchase quantities
- High-performance option with 5 million switching cycles
- Label design according to customer specifications, e.g. with QR-code for simple identification and traceability
- Low-PIM-Design
- High-power version



Switch SP2T

- Frequency range: DC – 40 GHz
- Switch type: failsafe and latching
- Connectors: SMA / N / K (2,92 mm) / BNC / TNC / SC / 2.4 mm
- Control voltage: 5 / 12 / 18 / 24 / 28 V
- Also available as miniature version (up to 85% smaller)
- Many additional options available



Multiple position Switches SP3T to SP18T

- Frequency range: DC – 40 GHz
- Switch type: Failsafe, Latching and Normally Open
- Connectors: SMA / N / K (2.92 mm) / BNC / TNC / SC / 2.4 mm
- Control voltage: 5 / 12 / 18 / 24 / 28 V
- Many additional options available



Transfer Switch DPDT

- Frequency range: DC – 26.5 GHz (40 GHz on request)
- Switch type: failsafe and latching
- Connectors: SMA / N / K (2.92 mm) / BNC / TNC / SC
- Control voltage: 5 / 12 / 18 / 24 / 28 V
- Many additional options available

POPULAR MODELS – *Immediately available from stock!*

- FAST • RELIABLE • INEXPENSIVE



Model	TR02-F12S184
Configuration	SPDT
Switch logic	failsafe
Frequency range	DC – 18 GHz
RF connectors	SMA female
Voltage	12 V DC (11 – 14 V DC)
Item-No.	46316



Model	TR02-F24S184
Configuration	SPDT
Switch logic	failsafe
Frequency range	DC – 18 GHz
RF connectors	SMA female
Voltage	24 V DC (20 – 28 V DC)
Item-No.	47666



Model	TR02-F28S184
Configuration	SPDT
Switch logic	failsafe
Frequency range	DC – 18 GHz
RF connectors	SMA female
Voltage	28 V DC (24 – 32 V DC)
Item-No.	46315

Order today and get it directly via our webshop!

* At 1 GHz, powerless switched (+25°C, at sea level, at 50 Ω)

POPULAR MODELS – *Immediately available from stock!*

- FAST
- RELIABLE
- INEXPENSIVE



Model	TR02-F12N124
Configuration	SPDT
Switch logic	failsafe
Frequency range	DC – 12,4 GHz
RF connectors	N female
Voltage	12 V DC (11 – 14 V DC)
Item-No.	46319



Model	TR02-F28N124
Configuration	SPDT
Switch logic	failsafe
Frequency range	DC – 12,4 GHz
RF connectors	N female
Voltage	28 V DC (24 – 32 V DC)
Item-No.	46313



Model	TR06-N12S184
Configuration	SP6T
Switch logic	Normally open
Frequency range	DC – 18 GHz
RF connectors	SMA female
Voltage	12 V DC (11 – 14 V DC)
Item-No.	46318

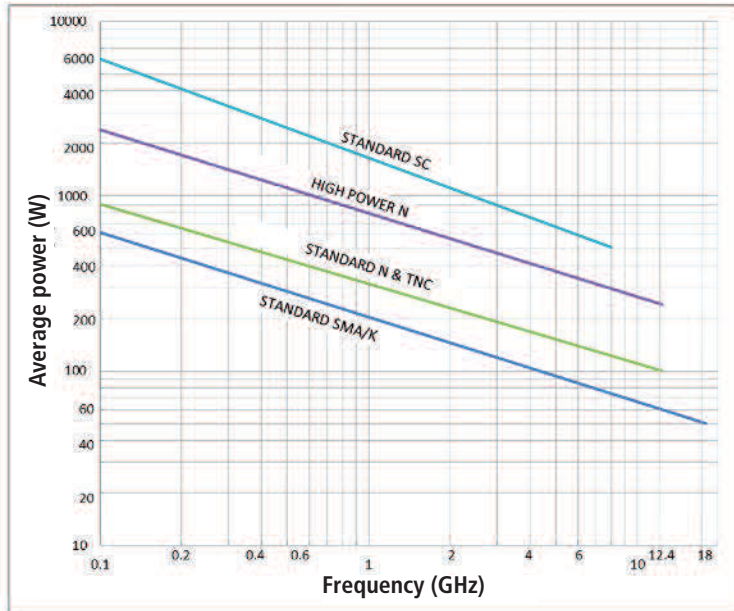


Model	TR06-N28S184
Configuration	SP6T
Switch logic	Normally open
Frequency range	DC–18 GHz
RF connectors	SMA female
Voltage	28 V DC (24 – 32 V DC)
Item-No.	46317

* At 1 GHz, powerless switched (+25°C, at sea level, at 50 Ω).

SELECT YOUR INDIVIDUAL SWITCH!

Power chart



VSWR	Derating Factor
1.5 : 1	0.96
2.0 : 1	0.88
2.5 : 1	0.84
3.0 : 1	0.75
3.5 : 1	0.70
4.0 : 1	0.64
4.5 : 1	0.60
5.0 : 1	0.56

This graph is based on the following conditions:

- Ambient temperature +20°C
- Sea level 0
- VSWR 1 : 1
- Cold switching

Ordering scheme

Switchmodel	Function/ configuration	Coil- voltage	Connections	Frequency range	Actuator/Control	Special options	
TR	XX-	X	XX	X	XX	X	-XX
TEleRel	01 = DPDT	F = Failsafe	12 Volt	C = SC female	01 = DC up to 1 GHz	0 = with overvoltage protection without TTL/self cutoff	C = positive common
TEleRel	02 = SPDT	L = Latching	18 Volt	K = 2.92 mm female	03 = DC up to 3 GHz	1 = with TTL-driver	D = Sub-D
TEleRel	03 = SP3T	N = Normally open	24 Volt	L = 2.4 mm female	04 = DC up to 4 GHz	2 = self cutoff (only at Latching)	E = extended temperature range
TEleRel	04 = SP4T		28 Volt	N = N female	05 = DC up to 5 GHz	3 = self cutoff & TTL (nur bei latching)	H = high performance (5 mio. switching cycles)
TEleRel	05 = SP5T			S = SMA female	12 = DC up to 12,4 GHz	4 = without overvoltage protection without TTL/self cutout	I = Indicators
TEleRel	06 = SP6T				16 = DC up to 16 GHz	5 = with binary decoder	L = low PIM
TEleRel	07 = SP7T				18 = DC up to 18 GHz		M = moisture seal
TEleRel	08 = SP8T				26 = DC up to 26,5 GHz		N = without mounting bracket at DPDT
TEleRel	09 = SP9T				40 = DC up to 40 GHz		P = high power
TEleRel	10 = SP10T						T = scheduling
TEleRel	11 = SP11T						V = V-design
TEleRel	12 = SP12T						Y = Y-design
TEleRel	13 = SP13T						
TEleRel	14 = SP14T						
TEleRel	15 = SP15T						
TEleRel	16 = SP16T						
TEleRel	17 = SP17T						
TEleRel	18 = SP18T						

***Please note that some options are not available depending on the model

CUSTOMIZED RF-SWITCHING UNITS



RF-Switching Units are used for processes automation in many applications or in EMC-measurement to provide individual RF-Solutions. As desktop housing, or 19"-Rack, it can be equipped with RF-Switches, attenuators, amplifiers, splitters, filters and much more. Control is via RS232, LAN, USB or GPIB.

- Individual housing – compact module or desktop housing or 19"-Rack
- Customized assembly
- Various control options and interfaces
- Convenient operation via touch screen

Description

Telemeter Electronic develops and manufactures completely individual switching solutions in close cooperation with the customer. Our switching units are characterised by the following features:

- Wide frequency range from DC up to 40 GHz
- Individual housing design:
 - Module / desktop housing with max. 3 HU (max. approx. 100 x 140 x 250 mm)
 - Rack (19"-format)
- Flexible equipped with different RF-components, e.g.
 - RF-switches (electromechanical RF-switches up to SP12T / solid state switch)
 - RF attenuators
 - Splitters / Combiners
 - Signal sources
 - Filters
- Control via numerous control interfaces
 - RS232
 - LAN
 - USB
 - IEEE-488
- Manual operation options
 - Touchscreen
 - Keyboard

Typical application examples

- Automated switching of RF-generators, amplifiers and antennas in EMC-applications
- Simulation of mobile radio network
- Switch matrix at complex workstations

Request a quotation for your individual switching unit!

REQUEST A QUOTATION

Name

Application

Company

Address

Notes

Phone

Technical data:

Frequency range

Configuration (SPDT, SPnT, DPDT, etc.)

Insertion loss (dB)

Isolation (dB)

Impedance (Ω)

VSWR

RF power (W)

Control voltage (V)

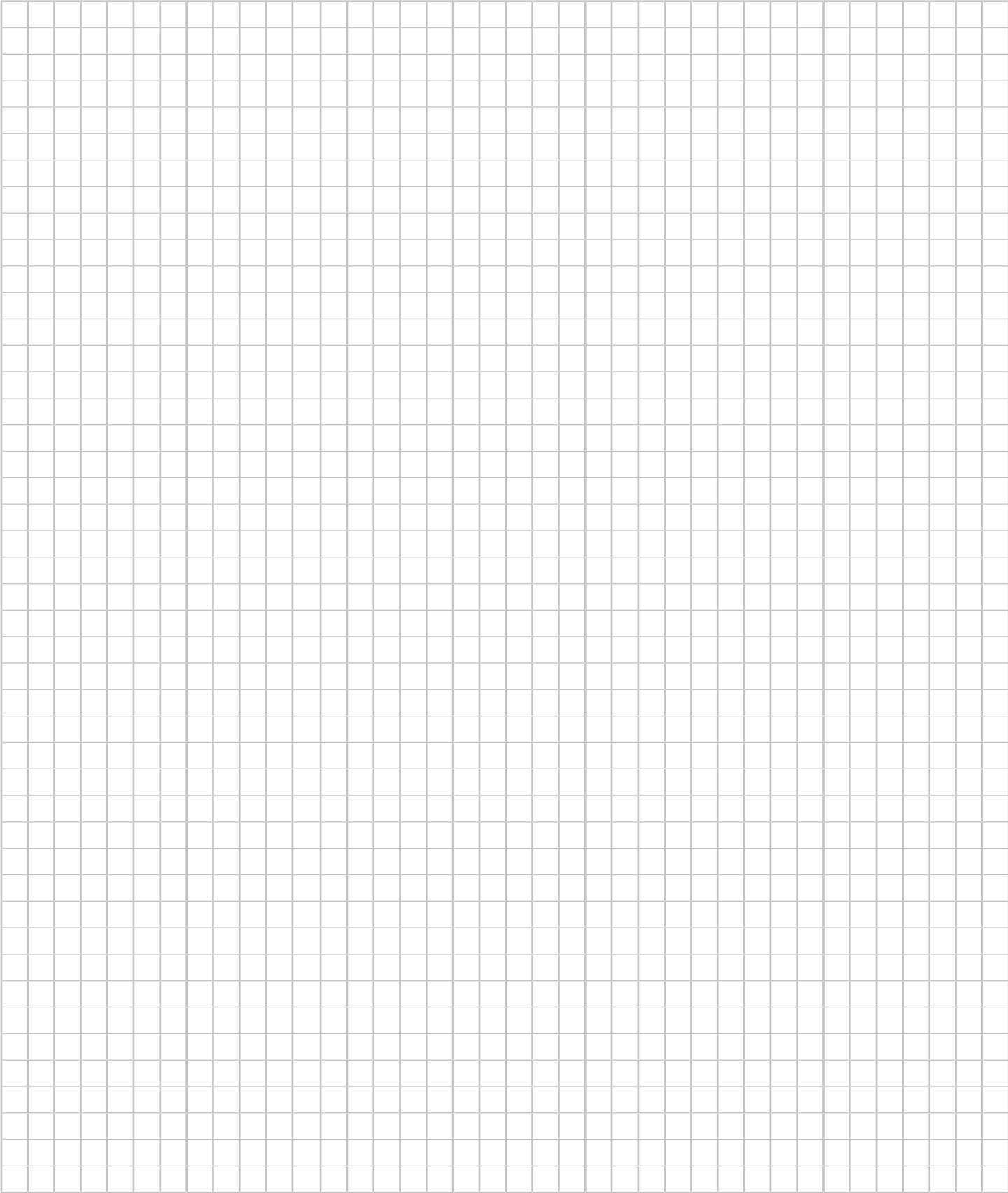
Quantity

REQUEST A QUOTATION

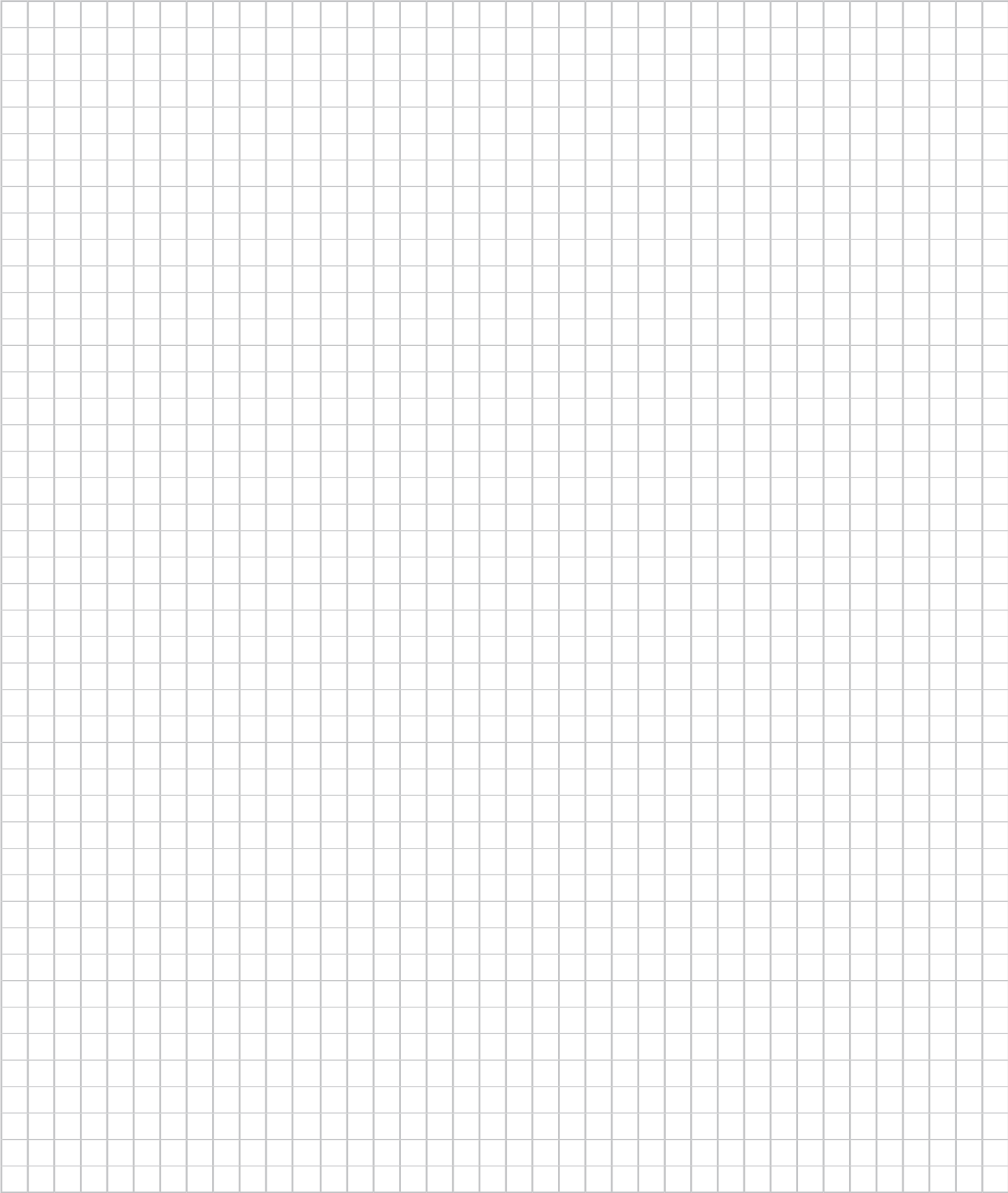
For RF-Switches:
Switch logic (failsafe, latching, normally open)
RF connectors (SMA, N, etc.)
Special options (e.g.: feedback contacts, extended lifetime, etc...)

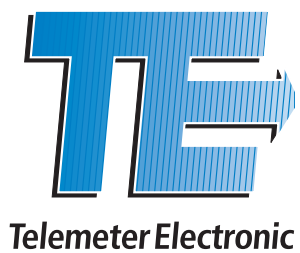
For Customized Switching Units:			
Control	<input type="checkbox"/> RS232	<input type="checkbox"/> LAN	<input type="checkbox"/> USB
	<input type="checkbox"/> IEEE488	<input type="checkbox"/> andere	
RF-Connectors	<input type="checkbox"/> SMA	<input type="checkbox"/> BNC	<input type="checkbox"/> N
	<input type="checkbox"/> TNC	<input type="checkbox"/> Other	
Mechanical layout	<input type="checkbox"/> Table housing		<input type="checkbox"/> 19"-Rack
	<input type="checkbox"/> Others		
Height	<input type="checkbox"/> 3 HU	<input type="checkbox"/> 1 HU	
	<input type="checkbox"/> Others		
Connectors	<input type="checkbox"/> Front panel	<input type="checkbox"/> Back panel	
Manual operation	<input type="checkbox"/> Without	<input type="checkbox"/> Touch panel	<input type="checkbox"/> Keyboard

NOTES OR DRAWINGS



NOTES OR DRAWINGS





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