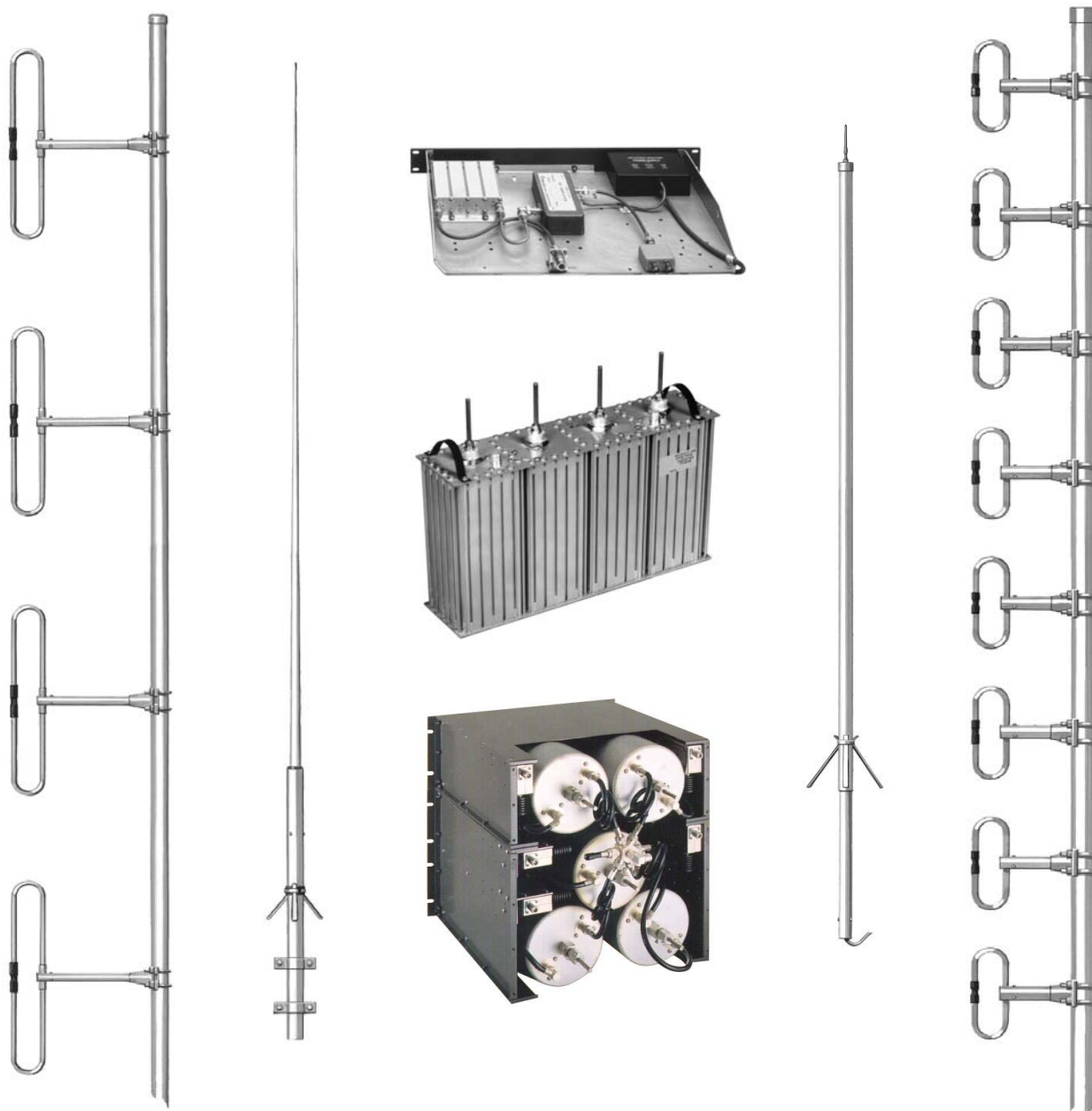


Suggested VHF/UHF Trunking Configurations

Reference Guide



Suggested VHF Trunking Configurations

2 to 5 Channel Tx Combiner / Rx Multicoupler, 2 Antennas

Combiners / Multicouplers

TJ221*

* - denotes number of channels
2, 3, 4 or 5

Tx Combiner (with dual junction isolators)
Tx - Tx separations down to 150 KHz

OR (optionally for closer separations down to 0 KHz)

TC221*

* - denotes number of channels
2, 4 or 5

Tx Combiner (with dual junction isolators, 19" rack mountable)

RM21208N

Rx Multicoupler (up to 8-channels - includes preselector)

Option:

PH2040E

Preselector (high performance, 1 MHz bandwidth)

Antennas

SRL210C4

Exposed Dipole Array 138-174 MHz
(8 dBd offset or bi-directional)

SRL229

Fiberglass Omnidirectional Antenna 138-174 MHz
(6.1 dBd)

SD235-3C

Low Intermod, Exposed Dipole Array, External Harness,
138-174 MHz (5.5 dBd omni or 8 dBd bi-directional)

Note: If the loss/channel in a close-spaced "TC" application is greater than your system can tolerate, please contact your Sinclair representative to discuss other possibilities such as our "CT" Combiner Series.

www.sinctech.com

Sinclair Technologies Inc.

55 Oriskany Drive, Tonawanda, New York, USA 14150 Tel: (800) 288-2763 Fax: (716) 874-4007

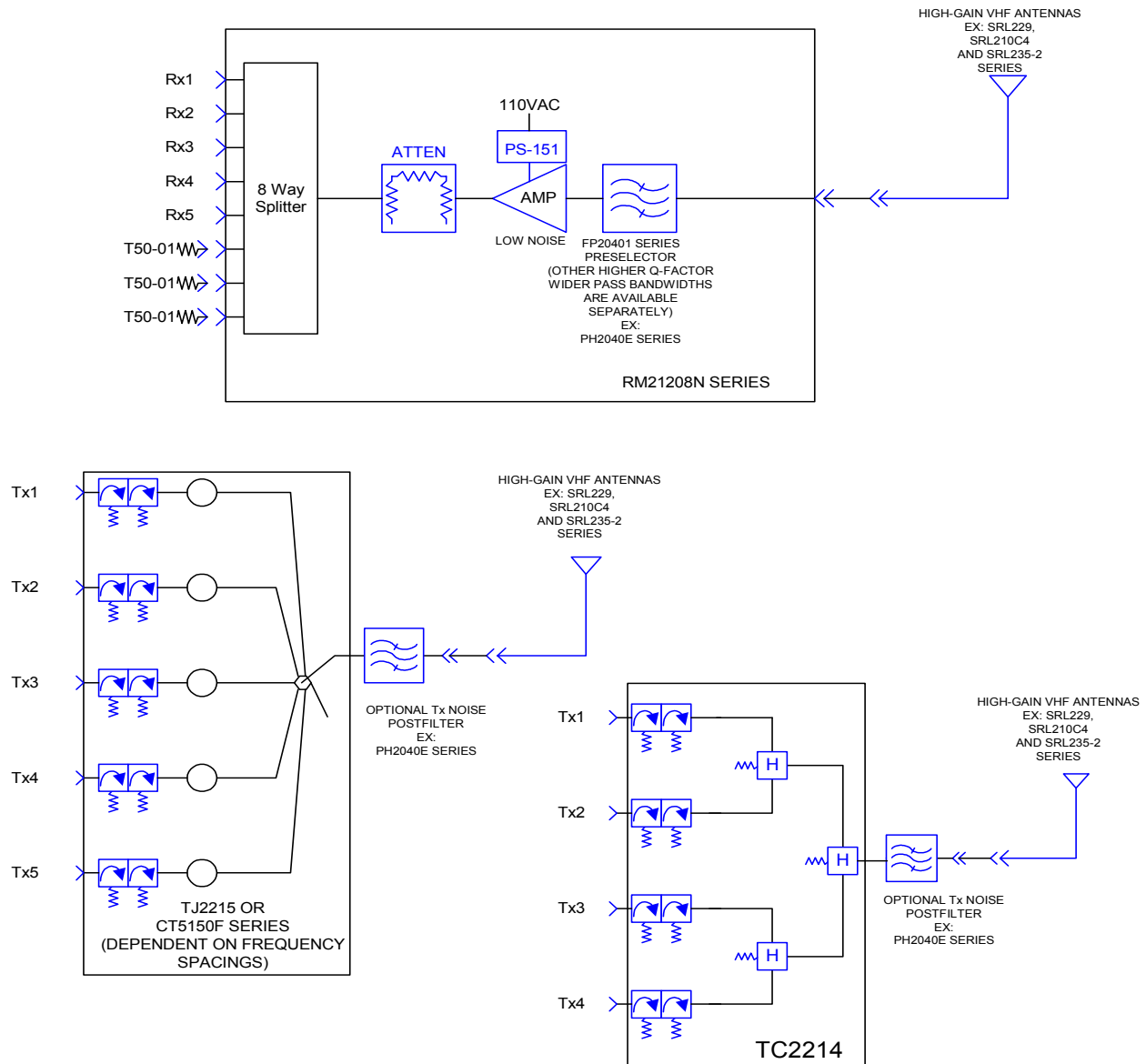
85 Mary Street, Aurora, Ontario, Canada L4G 6X5 Tel: (800) 263-3275 Fax: (905) 727-0861

Sinclair Technologies Ltd.

William James House, Cowley Road, Cambridge, UK CB4-0WX

Tel: +44 (0) 1223 42 03 03 Fax: +44 (0) 1223 42 06 06

VHF Trunking Configuration



Note: Sinclair can customize the antenna system based on the site requirements of the customer. Some customizations include: single antenna systems using a duplexer or multiple antennas, varying number of channels, high-power, simplex and half-duplex radio combining, cabinets, C-series through-line combining. Contact your Sinclair representative or Systems Engineer for details.

Suggested UHF Trunking Configurations

2 to 5 Channel Tx Combiner / Rx Multicoupler, 2 Antennas

Combiners / Multicouplers

TJ321*

* - denotes number of channels

2, 3, 4 or 5

Tx Combiner (with dual junction isolators)
Tx - Tx separations down to 200 KHz

OR (optionally for a 5-channel system)

RTC5400R*

* - denotes separation

A = 1.0 MHz

B = 0.5 MHz

C = 0.25 MHz

Tx Combiner
(with dual junction isolators, compact shared wall design)

OR (optionally for closer separations down to 0 KHz)

TC321*

* - denotes number of channels

2, 4 or 5

Tx Combiner (with dual junction isolators, 19" rack mountable)

RM31208N

Rx Multicoupler (up to 8-channels - includes preselector)

Option:

PH3040E

Preselector (high performance, 2 MHz bandwidth)

Option:

PH3060C

Preselector (high performance, 4 MHz bandwidth)

Antennas

SRL310C4

Exposed Dipole Array 406-512 MHz
(8 dBd offset or bi-directional)

SRL320

Omnidirectional Antenna 406-512 MHz
(10 dBd, 10 MHz BW)

SRL329HD

Omnidirectional Antenna 406-512 MHz
(6.2 dBd, 20 MHz BW)

Note: If the loss/channel in a close-spaced "TC" application is greater than your system can tolerate, please contact your Sinclair representative to discuss other possibilities such as our "CT" Combiner Series.

www.sinctech.com

Sinclair Technologies Inc.

55 Oriskany Drive, Tonawanda, New York, USA 14150 Tel: (800) 288-2763 Fax: (716) 874-4007

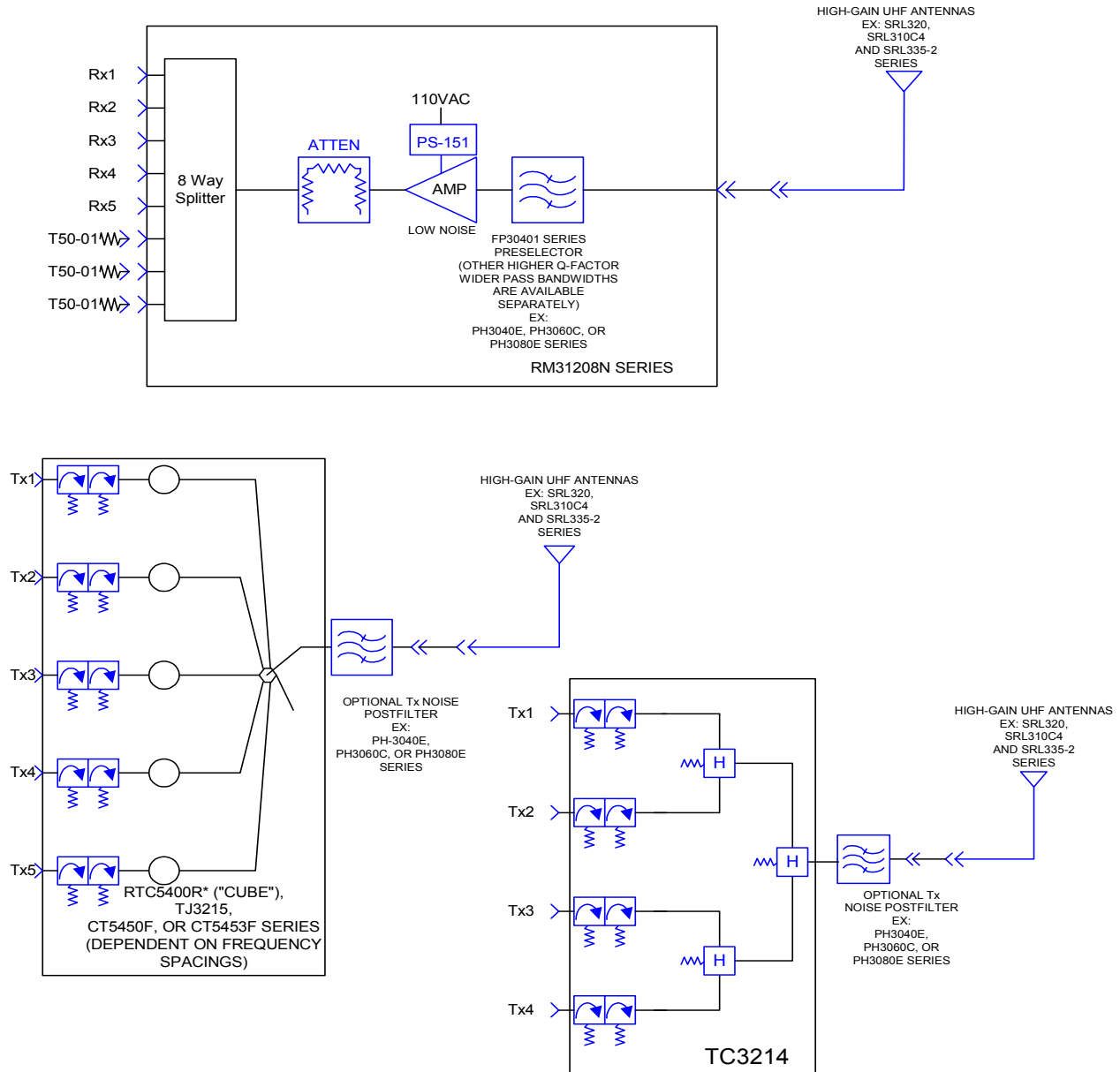
85 Mary Street, Aurora, Ontario, Canada L4G 6X5 Tel: (800) 263-3275 Fax: (905) 727-0861

Sinclair Technologies Ltd.

William James House, Cowley Road, Cambridge, UK CB4-0WX

Tel: +44 (0) 1223 42 03 03 Fax: +44 (0) 1223 42 06 06

UHF Trunking Configuration



Note: Sinclair can customize the antenna system based on the site requirements of the customer. Some customizations include: single antenna systems using a duplexer or multiple antennas, varying number of channels, high-power, simplex and half-duplex radio combining, cabinets, C-series through-line combining. Contact your Sinclair representative or Systems Engineer for details.

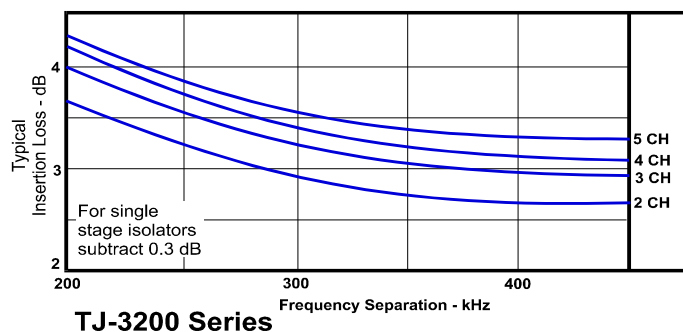
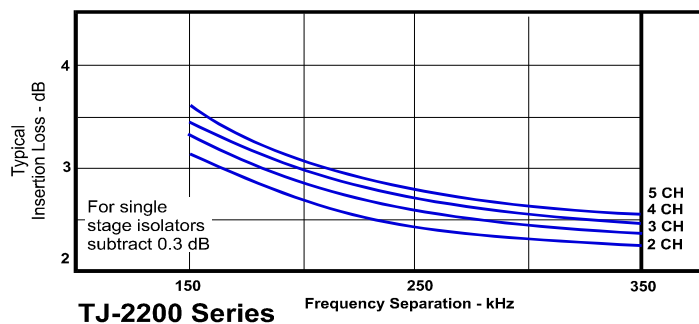
TJ Series

Sinclair's TJ series cavity ferrite transmitter combiners are available in 2- to 5-channel configurations for use in systems from 132-960 MHz. Each channel on these combiners includes a low-loss single or dual-stage isolator and Sinclair-developed High 'Q' bandpass cavity filter.

All models are 19-inch rack mountable and can be retuned in the field with simple test equipment.

The TJ series combiner is easily expanded to 20 channels, and is the building block used in many Sinclair combining systems.

Common electrical specifications are shown below. To select the combiner ideally suited to your applications, please consult your Sinclair representative.



www.sinctech.com

Sinclair Technologies Inc.

55 Oriskany Drive, Tonawanda, New York, USA 14150 Tel: (800) 288-2763 Fax: (716) 874-4007

85 Mary Street, Aurora, Ontario, Canada L4G 6X5 Tel: (800) 263-3275 Fax: (905) 727-0861

Sinclair Technologies Ltd.

William James House, Cowley Road, Cambridge, UK CB4-0WX

Tel: +44 (0) 1223 42 03 03 Fax: +44 (0) 1223 42 06 06



Sinclair Technologies Inc. is a global leader in the manufacture and distribution of high-quality fixed and mobile antennas, filters, receiver multi-couplers, transmitter combiners and related components, and complete antenna systems constructed from these elements.

The Company's products are used extensively in the mobile radio, public safety, military, cellular and transportation sectors and operate in the 30 MHz to 1.0 GHz frequency ranges.

In addition to a comprehensive portfolio of standard products, Sinclair's applications engineers design customized products and systems to meet the unique needs of our customers, and can provide on-site evaluations, special testing and in-service support

www.sinctech.com



www.sinctech.com

VHF-UHF Trunking Configurations Rev4.xls (10-Jul-03)

Sinclair Technologies Inc.

55 Oriskany Drive, Tonawanda, New York, USA 14150 Tel: (800) 288-2763 Fax: (716) 874-4007

85 Mary Street, Aurora, Ontario, Canada L4G 6X5 Tel: (800) 263-3275 Fax: (905) 727-0861

Sinclair Technologies Ltd.

William James House, Cowley Road, Cambridge, UK CB4-0WX

Tel: +44 (0) 1223 42 03 03 Fax: +44 (0) 1223 42 06 06