

2.048/5/10MHz Frequency Distribution over Optical Fiber Solution

Introduction:

VCL-2752 is a high-performance optical fiber distribution solution for distributing **2.048MHz**, **5MHz** and **10MHz** frequencies over optical or copper cables. VCL-2752 is available in a Transmit and a Receive variant.

VCL-2752-T (Transmitter): converts a “2.048/5/10MHz Input” and transmits over an optical fiber.

VCL-2752-R (Receiver): receives “2.048/5/10MHz Input” over optical fiber and converts the optical input to 4 x 2.048/5/10MHz BNC outputs.

The VCL-2752-R may also be used in conjunction with either VCL-2752-T; VCL-2156, VCL-2486-F, VCL-2486-G or with VCL-2145D units to transmit and distribute a 2.048/5/10MHz signal over SFP based Optical fiber links.

Features and Highlights:

- Transparent to Optical 2.048/5/10MHz Input
- Output shall be phase-synchronized to the input
- Up to 4 x 2.048/5/10MHz Outputs
- 48V DC, 110V DC, 220V DC or AC Power Supply options.

VCL-2752-T Input:

Input Type	Number of Input	Connector
2.048 /5/10MHz	1	BNC

VCL-2752-T Output:

Output Type	Number of Output	Connector
Optical 2.048/5/10MHz	1	SFP Based

VCL-2752-R Input:

Input Type	Number of Input	Connector
Optical 2.048/5/10MHz	1	SFP Based

VCL-2752-R Outputs:

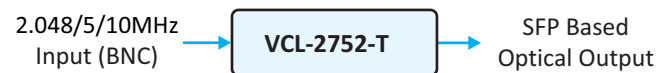
Output Type	Number of Outputs	Connector
2.048/5/10MHz	4	BNC

Conversions Parameters:

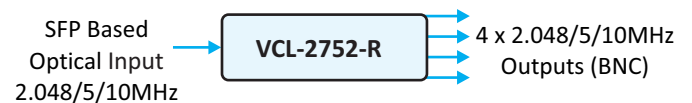
- Frequency Delay / Offset $\leq 30\text{ns}$ between Input and Output



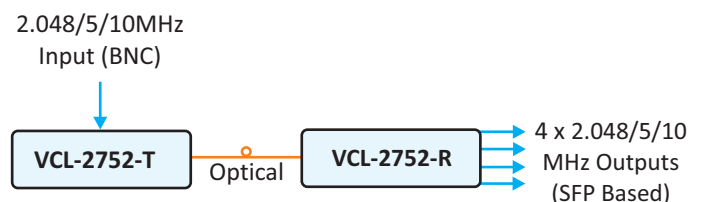
Block Diagram - VCL-2752-T:



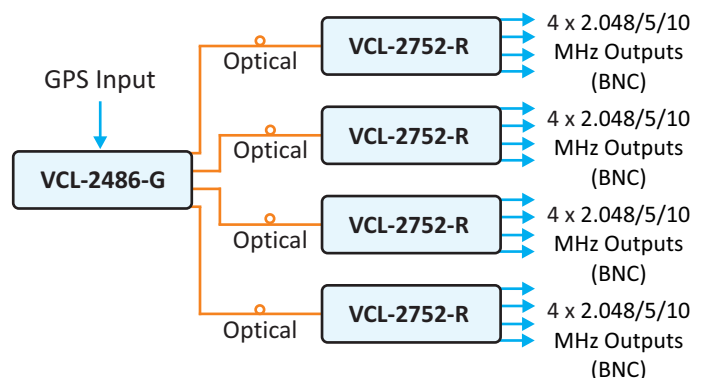
Block Diagram - VCL-2752-R:



Application Diagram # 1:



Application Diagram # 2:



Power Input and Consumption:

- 18V DC to 60V DC (48V DC nominal)
- < 10W at ambient (steady state 24°C)

Power Supply Options:

- 24V DC / 48V DC
- AC (100V AC to 240V AC, 50/60 Hz) to 24V DC
- External Adapter
- 110V DC / 220V DC to 24V DC - External Adapter

Environmental (Equipment):

Operational	-10°C to +60°C (Typical: +25°C)
Cold start	0°C
Storage	-20°C to +70°C
Humidity	95% non-condensing
Cooling	Convention Cooled. No cooling fans are required.

Regulatory Compliance:

- RoHS
- CE Marking
- Complies to IEEE and IEC standards
- Transportation ETS 300 019 Class 2.3

Standards & Compliance:

- IEC - EMC – Certified to EN 55032: 2005 / CISPR 32 Class A, EN 55024:2005, IEC 61000-4-2
- CE – 2001/95/EC, 2006/95/EC, EN60950-1, EN61000-6-2, EN61000-6-4
- FCC – FCC Part 15 Class A: Conducted Emission test on power Line
- FCC Part 15 Class A: Radiated Emission >1 GHz FCC, 6 GHz, on Power Line.

Ordering Information:**Base Unit:**

Part No.	Description
VCL-2752-T	VCL-2752-T (Transmitter) 1 x 2.048/5/10MHz Input (BNC) 1 x SFP based Optical Output DIN Rail Installation Kit includes Mounting Hardware, Documentation, User Manual
VCL-2752-R	VCL-2752-R (Receiver) 1 x 2.048/5/10MHz Input (SFP Based) 4 x 2.048/5/10MHz Outputs (BNC) DIN Rail Installation Kit includes Mounting Hardware, Documentation, User Manual

Add Optional External Adaptor (if required):

AC	100V AC to 240V AC, 50/60 Hz) to 24V DC External Adapter
DC	110V DC / 220V DC to 24V DC External Adapter

Technical specifications are subject to changes without notice.
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