

SHDSL.bis

Up to 60 Mbps

E1 / Ethernet / Nx64

FlexDSL Orion3

TDM Based SHDSL.bis



Features

- SHDSL and SHDSL.bis (TC-PAM16/32/64/128)
- Up to 15.2Mbps over single and up to 60.8Mbps over quadruple pair copper
- E1 (G.703/704) and Nx64 (V.35/36, X.21)
- Daughterboard's: RS-232/485/422, In-/Output, Real Time Clock, Memory for Log, Bluetooth
- Layer 2 managed Ethernet Switch with VLAN support (10/100BaseT)
- Multi-Service Operation
- Point-to-Point, Point-to-Multipoint and Ring
- Console Port, Telnet, Web, SNMP Management
- 48VDC Powered
- Remote Power Support 120/200VDC
- Repeater/Regenerator Support

The FlexDSL **Orion3 SHDSL.bis Extended** product family offers a broad range of products, which are based on the latest SHDSL.bis standards (ITU-T G.991.2 & ETS TS 101 524), while also being fully interoperable with all our existing SHDSL equipment (Orion1 & Orion2). The FlexDSL Orion3 supports TC-PAM8/16/32 and the new TC-PAM64/128 line coding. The support of these line codes ensures compatibility with existing SHDSL equipment, that is already installed, in order to protect customer investments, while at the same time providing an upgrade path to the newest DSL technologies.

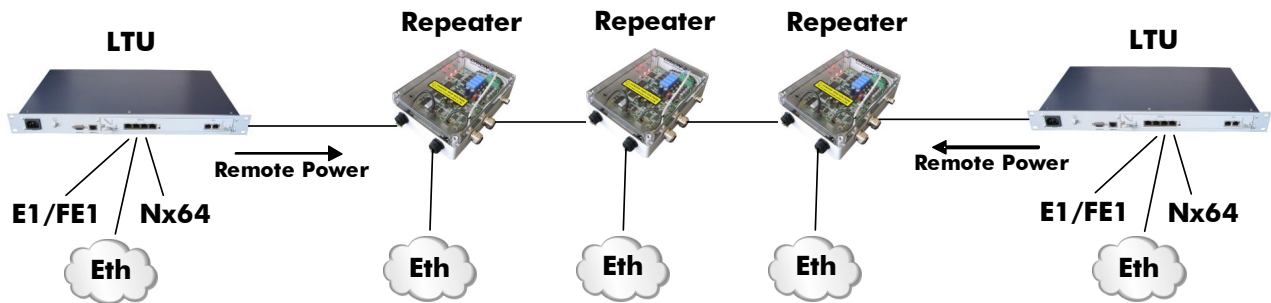
SHDSL.bis Extended allows symmetrical data and voice transmission at speeds up to 15.2Mbps over a single pair of copper. In addition, the FlexDSL Orion3 modem range also supports DSL channel bonding for up to 4 copper pairs in order to achieve speeds to 60.8Mbps! This incredible speed makes Fiber installations in a lot of places needless. FlexDSL Orion3 SHDSL.bis Extended modems can provide up to 4 complete E1 interfaces, which support framed and unframed services (G.703/G.704). An integrated 2 or 4 port Ethernet layer 2 managed switch with VLAN support (10/100BaseT) ensures connectivity to IP services. Beside of E1 and Ethernet we have additional interfaces like Nx64 that can be configured to be a V.35, V.36, X.21 or V.24 (RS-232) interface by software. This makes FlexDSL Orion3 SHDSL.bis Extended modems a perfect solution for a wide range of applications in which TDM and IP services need to be transmitted over copper wires.

Like all FlexDSL Orion products, the Orion3 SHDSL.bis Extended modems family is based on industrial components and is manufactured according to highest quality standards providing additional value due to the extended temperature range and higher reliability. The combination of comprehensive functions providing maximum flexibility together with the higher quality of the FlexDSL Orion3 SHDSL.bis Extended product family make it the perfect choice for all your DSL needs.

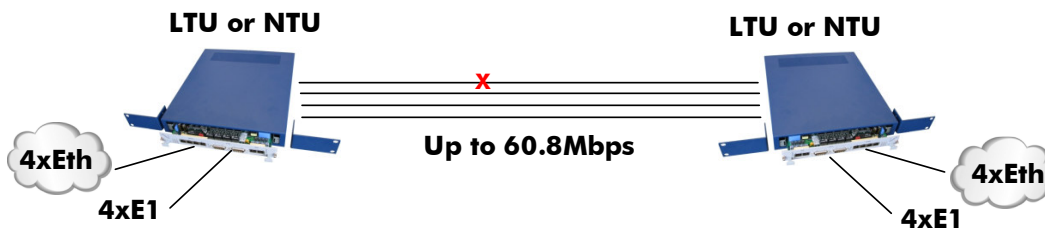
Specifications are subject to change without notice

SHDSL.bis
Up to 60 Mbps
E1 / Ethernet / Nx64

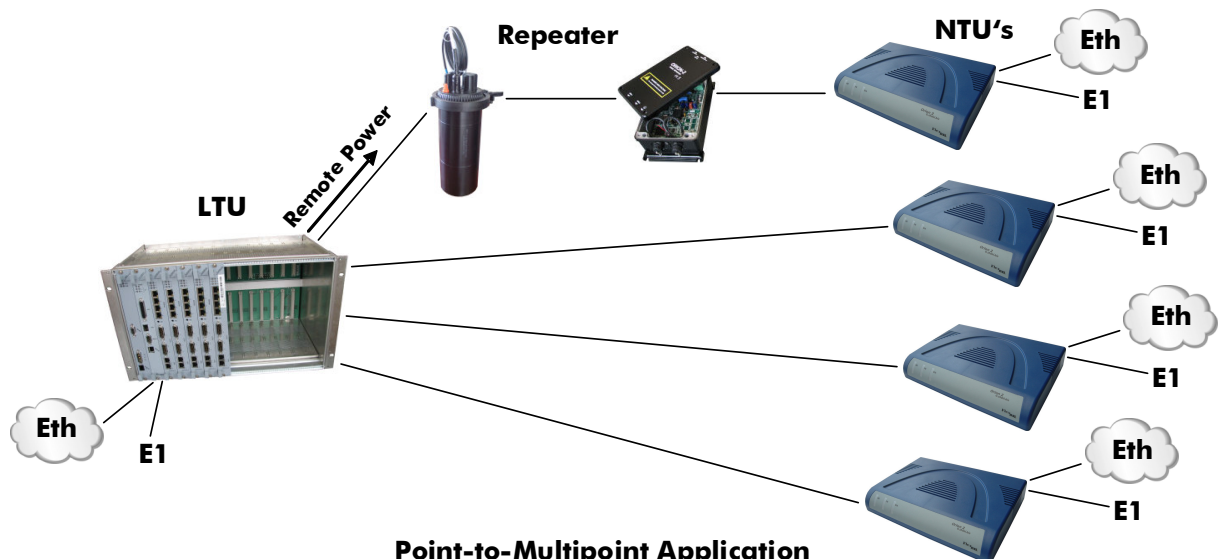
FlexDSL Orion3 SHDSL.bis Extended Applications



Ethernet Add/Drop Repeater Application with Remote Power



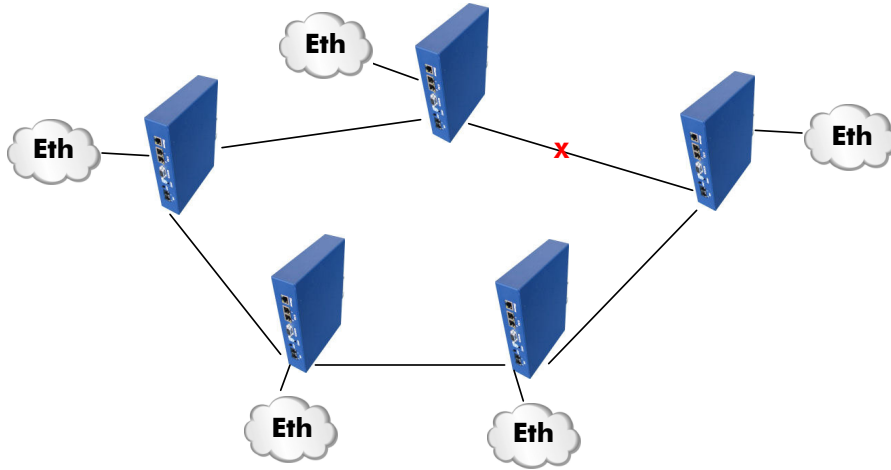
Point-to-Point Bonding Application with Failure Protection



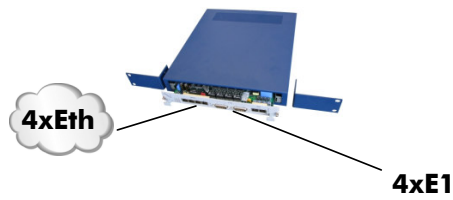
Point-to-Multipoint Application

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SHDSL.bis
Up to 60 Mbps
E1 / Ethernet / Nx64



Ring Application



Ethernet to E1 Converter

Specifications are subject to change without notice

SHDSL.bis
Up to 60 Mbps
E1 / Ethernet / Nx64

Orion3 SHDSL Standalone Modem



Model: FG-PAM-SAN-2E1B/2Eth,V80

DSL Version: SHDSL / SHDSL.bis / Extended
 Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
 Data Rate: 128kbps - 15.232Mbps
 Copper Pairs: 1
 Modes: Master / Slave / Auto
 Interface: 2x E1 (75/120Ohm), 2x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power: 36 to 230VDC, accepts local and remote power
 Physical Interfaces: RJ48 (E1), RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
 Management: Console Port, Telnet, HTTP and SNMP
 Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Model: FG-PAM-SA2N-2E1B/2Eth,V81

DSL Version: SHDSL / SHDSL.bis / Extended
 Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
 Data Rate: 128kbps - 30.464Mbps, 2x 15.232Mbps
 Copper Pairs: 2
 Modes: Master / Slave / Auto / Multipoint / Multipair
 Interface: 2x E1 (75/120Ohm), 2x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power: 36 to 230VDC, accepts local and remote power
 Physical Interfaces: RJ48 (E1), RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
 Management: Console Port, Telnet, HTTP and SNMP
 Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Model: FG-PAM-SAN-2Eth,V82

DSL Version: SHDSL / SHDSL.bis / Extended
 Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
 Data Rate: 128kbps - 15.232Mbps
 Copper Pairs: 1
 Modes: Master / Slave / Auto
 Interface: 2x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power: 36 to 230VDC, accepts local and remote power
 Physical Interfaces: RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
 Management: Console Port, Telnet, HTTP and SNMP
 Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Model: FG-PAM-SA2N-2Eth,V83

DSL Version: SHDSL / SHDSL.bis / Extended
 Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
 Data Rate: 128kbps - 30.464Mbps, 2x 15.232Mbps
 Copper Pairs: 2
 Modes: Master / Slave / Auto / Multipoint / Multipair
 Interface: 2x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power: 36 to 230VDC, accepts local and remote power
 Physical Interfaces: RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
 Management: Console Port, Telnet, HTTP and SNMP
 Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Model: FG-PAM-SA4N-4Eth,V84

DSL Version: SHDSL / SHDSL.bis / Extended
 Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
 Data Rate: 128kbps - 60.928Mbps, 4x 15.232Mbps
 Copper Pairs: 4
 Modes: Master / Slave / Auto / Multipoint / Multipair
 Interface: 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power: 36 to 230VDC, accepts local and remote power
 Physical Interfaces: RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
 Management: Console Port, Telnet, HTTP and SNMP
 Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Specifications are subject to change without notice

SHDSL.bis

Up to 60 Mbps

E1 / Ethernet / Nx64



Model: FG-PAM-SAN-N64/2E1B,V85

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 15.232Mbps
Copper Pairs: 1
Modes: Master / Slave / Auto
Interface: 2x E1 (75/120Ohm), 1x Nx64 (V.35,V.36,X.21)
Power: 36 to 230VDC, accepts local and remote power
Physical Interfaces: RJ48 (E1), DB26 (Nx64), RJ48 (SHDSL), Molex (Power), DB9 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Model: FG-PAM-SA2N-N64/2E1B,V86

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 2
Modes: Master / Slave / Auto / Multipoint / Multipair
Interface: 2x E1 (75/120Ohm), 1x Nx64 (V.35,V.36,X.21)
Power: 36 to 230VDC, accepts local and remote power
Physical Interfaces: RJ48 (E1), DB26 (Nx64), RJ48 (SHDSL), Molex (Power), DB9 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Model: FG-PAM-SAN-N64/2Eth,V87

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 15.232Mbps
Copper Pairs: 1
Modes: Master / Slave / Auto
Interface: 1x Nx64 (V.35,V.36,X.21), 2x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 230VDC, accepts local and remote power
Physical Interfaces: DB26 (Nx64), RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Model: FG-PAM-SA2N-N64/2Eth,V88

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 2
Modes: Master / Slave / Auto / Multipoint / Multipair
Interface: 1x Nx64 (V.35,V.36,X.21), 2x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 230VDC, accepts local and remote power
Physical Interfaces: DB26 (Nx64), RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Specifications are subject to change without notice

SHDSL.bis

Up to 60 Mbps

E1 / Ethernet / Nx64

Orion3 SHDSL DIN Rail Modem



Model: FG-PAM-RAIL2N-2E1B/2Eth, V81

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
Data Rate: 128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 2
Modes: Master / Slave / Auto / Multipoint / Multipair
Interface: 2x E1 (75/120Ohm), 2x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 230VDC, accepts local and remote power
Physical Interfaces: RJ48 (E1), RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

Model: FG-PAM-RAIL4N-4Eth, V84

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
Data Rate: 128kbps - 60.928Mbps, 4x 15.232Mbps
Copper Pairs: 4
Modes: Master / Slave / Auto / Multipoint / Multipair
Interface: 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 230VDC, accepts local and remote power
Physical Interfaces: RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)

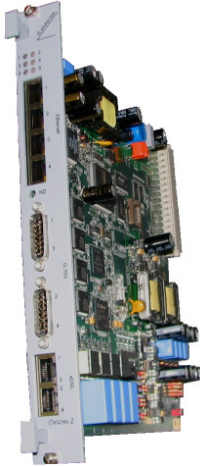
Specifications are subject to change without notice

SHDSL.bis

Up to 60 Mbps

E1 / Ethernet / Nx64

FlexDSL[®]
Telecommunications AG



Orion3 SHDSL Sub Rack Module

Model: FG-PAM-SRL-2E1B/4Eth-RP,V90

DSL Version: SHDSL / SHDSLbis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 15.232Mbps
Copper Pairs: 1
Modes: Master / Slave / Auto
Interface: 2x E1 (75/120Ohm), 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 72VDC local power, 120/200VDC remote power source
Physical Interfaces: DB15 (E1), RJ45 (Ethernet), RJ48 (SHDSL), DIN41612 (Backplane)
Management: Telnet, HTTP, SNMP, Console Port via ACU/TCU

Model: FG-PAM-SRL-2E1B/N64/4Eth-RP,V91

DSL Version: SHDSL / SHDSLbis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 15.232Mbps
Copper Pairs: 1
Modes: Master / Slave / Auto
Interface: 2x E1 (75/120Ohm), 1x Nx64 (V.35,V.36,X.21), 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 72VDC local power, 120/200VDC remote power source
Physical Interfaces: DB15 (E1), DB26 (Nx64), RJ45 (Ethernet), RJ48 (SHDSL), DIN41612 (Backplane)
Management: Telnet, HTTP, SNMP, Console Port via ACU/TCU

Model: FG-PAM-SR2L-4E1B/4Eth-RP,V93

DSL Version: SHDSL / SHDSLbis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 2
Modes: Master / Slave / Auto / Multipoint / Multipair
Interface: 4x E1 (75/120Ohm), 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 72VDC local power, 120/200VDC remote power source
Physical Interfaces: DB15 (E1), RJ45 (Ethernet), RJ48 (SHDSL), DIN41612 (Backplane)
Management: Telnet, HTTP, SNMP, Console Port via ACU/TCU

Model: FG-PAM-SR2L-2E1B/N64/4Eth-RP,V94

DSL Version: SHDSL / SHDSLbis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 2
Modes: Master / Slave / Auto / Multipoint / Multipair
Interface: 2x E1 (75/120Ohm), 1x Nx64 (V.35,V.36,X.21), 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 72VDC local power, 120/200VDC remote power source
Physical Interfaces: DB15 (E1), DB26 (Nx64), RJ45 (Ethernet), RJ48 (SHDSL), DIN41612 (Backplane)
Management: Telnet, HTTP, SNMP, Console Port via ACU/TCU

Model: FG-PAM-SR4L-4E1B/4Eth-RP,V96

DSL Version: SHDSL / SHDSLbis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 60.928Mbps, 4x 15.232Mbps
Copper Pairs: 4
Modes: Master / Slave / Auto / Multipoint / Multipair
Interface: 4x E1 (75/120Ohm), 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 72VDC local power, 120/200VDC remote power source
Physical Interfaces: DB15 (E1), RJ45 (Ethernet), RJ48 (SHDSL), DIN41612 (Backplane)
Management: Telnet, HTTP, SNMP, Console Port via ACU/TCU

Specifications are subject to change without notice

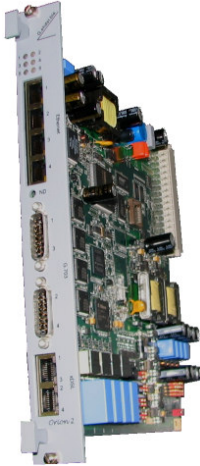
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www.SHDSL.com

SHDSL.bis

Up to 60 Mbps

E1 / Ethernet / Nx64



Model: FG-PAM-SR4L-4Eth,V98

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
Data Rate: 128kbps - 60.928Mbps, 4x 15.232Mbps
Copper Pairs: 4
Modes: Master / Slave / Auto / Multipoint / Multipair
Interface: 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 72VDC local power
Physical Interfaces: RJ45 (Ethernet), RJ48 (SHDSL), DIN41612 (Backplane)
Management: Telnet, HTTP, SNMP, Console Port via ACU/TCU

Model: FG-PAM-SR2L-4E1B/4Eth-350,V11

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
Data Rate: 128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 2
Modes: Master / Slave / Auto / Multipoint / Multipair
Interface: 4x E1 (75/120Ohm), 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 72VDC local power, 200/350VDC remote power source
Physical Interfaces: DB15 (E1), RJ45 (Ethernet), Screwing Terminal (SHDSL), DIN41612 (Backplane)
Management: Telnet, HTTP, SNMP, Console Port via ACU/TCU

Specifications are subject to change without notice

SHDSL.bis
Up to 60 Mbps
E1 / Ethernet / Nx64

Orion3 SHDSL Repeater



Model: FG-PAM-RGN-Eth-PL, V83
FG-PAM-RG2N-Eth-PL, V84

DSL Version: SHDSL / SHDSLbis / Extended
 Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
 Data Rate: 128kbps - 15.232Mbps
 128kbps - 30.464Mbps, 2x 15.232Mbps
 Copper Pairs: 1 (FG-PAM-RGN-Eth-PL, V83)
 2 (FG-PAM-RG2N-Eth-PL, V84)
 Modes: Master / Slave / Auto
 Interface: 2/4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power: 36 to 230VDC, accepts local and remote power
 Physical Interfaces: RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
 Management: Console Port, Telnet, HTTP and SNMP
 Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)
 Powering by external Remote Power Module FG-SR2-RP
 Temperature Range: -25 to +80°C



Model: FG-PAM-RGN-2Eth-RL, V81
FG-PAM-RG2N-4Eth-RL, V84

DSL Version: SHDSL / SHDSLbis / Extended
 Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
 Data Rate: 128kbps - 15.232Mbps
 128kbps - 30.464Mbps, 2x 15.232Mbps
 Copper Pairs: 1 (FG-PAM-RGN-2Eth-RL, V81)
 2 (FG-PAM-RG2N-4Eth-RL, V84)
 Modes: Master / Slave / Auto
 Interface: 2/4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power: 36 to 230VDC, accepts local and remote power
 Physical Interfaces: RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
 Management: Console Port, Telnet, HTTP and SNMP
 Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)
 Powering by external Remote Power Module FG-SR2-RP
 Temperature Range: -25 to +80°C



Model: FG-PAM-RGN-Eth-IPP, V83R
FG-PAM-RG2N-Eth-IPP, V84R

DSL Version: SHDSL / SHDSLbis / Extended
 Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
 Data Rate: 128kbps - 15.232Mbps
 128kbps - 30.464Mbps, 2x 15.232Mbps
 Copper Pairs: 1 (FG-PAM-RGN-Eth-IPP, V83R)
 2 (FG-PAM-RG2N-Eth-IPP, V84R)
 Modes: Master / Slave / Auto
 Interface: 1x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power: 36 to 230VDC, accepts local and remote power
 Physical Interfaces: RJ45 (Ethernet), Screwing Terminal (SHDSL, Power), RJ45 (Management)
 Management: Console Port, Telnet, HTTP and SNMP
 Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)
 Powering by external Remote Power Module FG-SR2-RP
 Temperature Range: -25 to +80°C

Specifications are subject to change without notice

SHDSL.bis
Up to 60 Mbps
E1 / Ethernet / Nx64



Model: FG-PAM-RGN-Eth-IPL, V83R
FG-PAM-RG2N-Eth-IPL, V84R

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 15.232Mbps
128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 1 (FG-PAM-RGN-Eth-IPL, V83R)
2 (FG-PAM-RG2N-Eth-IPL, V84R)
Modes: Master / Slave / Auto
Interface: 1x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 230VDC, accepts local and remote power
Physical Interfaces: RJ45 (Ethernet), Screwing Terminal (SHDSL, Power), RJ45 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)
Powering by external Remote Power Module FG-SR2-RP
Temperature Range: -25 to +80°C

Model: FG-PAM-RGN-Eth-IPH, V83R
FG-PAM-RG2N-Eth-IPH, V84R

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 15.232Mbps
128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 1 (FG-PAM-RGN-Eth-IPH, V83R)
2 (FG-PAM-RG2N-Eth-IPH, V84R)
Modes: Master / Slave / Auto
Interface: 1x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 230VDC, accepts local and remote power
Physical Interfaces: RJ45 (Ethernet), Screwing Terminal (SHDSL, Power), RJ45 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)
Powering by external Remote Power Module FG-SR2-RP
Temperature Range: -25 to +80°C



Model: FG-PAM-RGN-Eth-IPS, V83R
FG-PAM-RG2N-Eth-IPS, V84R

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 15.232Mbps
128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 1 (FG-PAM-RGN-Eth-IPS, V83R)
2 (FG-PAM-RG2N-Eth-IPS, V84R)
Modes: Master / Slave / Auto
Interface: 1x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 230VDC, accepts local and remote power
Physical Interfaces: RJ45 (Ethernet), Screwing Terminal (SHDSL, Power), RJ45 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)
Powering by external Remote Power Module FG-SR2-RP
Temperature Range: -25 to +80°C



Model: FG-PAM-RG2N-350,V10

DSL Version: SHDSL / SHDSL.bis / Extended
Modulation: TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64/TC-PAM128
Data Rate: 128kbps - 30.464Mbps, 2x 15.232Mbps
Copper Pairs: 2
Modes: Master / Slave / Auto
Interface: 1x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Power: 36 to 350VDC, accepts local and remote power
Physical Interfaces: RJ45 (Ethernet), Screwing Terminal (SHDSL, Power), RJ45 (Management)
Management: Console Port, Telnet, HTTP and SNMP
Power Supply: 90-260VAC option with FG-PAM-PA48G (not included)
Powering by external Remote Power Module FG-SR2-RP
Temperature Range: -25 to +80°C

Specifications are subject to change without notice

SHDSL.bis

Up to 60 Mbps

E1 / Ethernet / Nx64



Orion3 Daughterboard's

Model: FG-PAM-Nx64

Interface: V.36, V.36, X.21, V.24

Physical Interfaces: DB26

Data Rate: 64kbps - 4.096Mbps

Model: FG-PAM-RS232

Interface: RS-232, V.24/28

Physical Interfaces: DB9

Data Rate: 110-115200 Baud

Model: FG-PAM-RS485/422

Interface: RS-485/422

Physical Interfaces: DB9

Data Rate: 64kbps - 4.096Mbps

Model: FG-PAM-8IN4OUT

Interface: 8 isolated Inputs, 4 isolated Outputs

Physical Interfaces: Screwing Terminal

Model: FG-PAM-RTC

Interface: Real Time Clock and Memory for Log Files

Model: FG-PAM-BLUETOOTH

Interface: Bluetooth

Specifications are subject to change without notice