Połączenia do OPS

Duże 32 slotowe urządzenia CN6500 zostały wyposażone w moduły switchy optycznych – OPS. Zapewniają one protekcję ścieżek optycznych dla połączeń 100G do routerów ASR oraz OTN pomiędzy węzłami DWDM.

Wysogotowo

|  |  |  |  |  |  |  |  |  |  |  |
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| Wysogotowo ROADM | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G ASR | Karta 1-31 | Do Konina | 34 | 17/18 | Podstawowe | 13/14 | Konin | CMD2 | 53 RED | 17/18 |
|  |  |  |  |  | Zapasowe | 15/16 | Poznań | CMD6 | 53 RED | 17/18 |
| 100G ASR | Karta 1-35 | Do Leszna | 34 | 23/24 | Podstawowe | 19/20 | Leszno | CMD4 | 55 RED | 21/22 |
|  |  |  |  |  | Zapasowe | 21/22 | Poznań | CMD8 | 55 RED | 21/22 |

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| Wysogotowo OTN | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G OTN | Karta 2-25 | Do Poznań1 | 28 | 17/18 | Podstawowe | 13/14 | Poznań1 | CMD6 | 68 RED | 47/48 |
|  |  |  |  |  | Zapasowe | 15/16 | Poznań2 | CMD8 | 68 RED | 47/48 |
| 100G OTN | Karta 2-31 | Do Konina | 28 | 23/24 | Podstawowe | 19/20 | Konin | CMD2 | 64 RED | 39/40 |
|  |  |  |  |  | Zapasowe | 21/22 | Poznań1 | CMD6 | 64 RED | 39/40 |
| 100G OTN | Karta 2-33 | Do Leszna | 28 | 11/12 | Podstawowe | 7/8 | Leszno | CMD4 | 66 RED | 43/44 |
|  |  |  |  |  | Zapasowe | 9/10 | Poznań2 | CMD8 | 66 RED | 43/44 |
| 100G OTN | Karta 2-37 | Do Poznań2 | 28 | 5/6 | Podstawowe | 1/2 | Poznań2 | CMD8 | 69 RED | 49/50 |
|  |  |  |  |  | Zapasowe | 3/4 | Poznań1 | CMD6 | 69 RED | 49/50 |

Poznań

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Poznań ROADM | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G ASR | Karta 1-31 | Do Piły | 34 | 17/18 | Podstawowe | 13/14 | Piła | CMD2 | 58 RED | 27/28 |
|  |  |  |  |  | Zapasowe | 15/16 | Wysogotowo | CMD6 | 58 RED | 27/28 |
| 100G ASR | Karta 1-35 | Do Ostrowa | 34 | 23/24 | Podstawowe | 19/20 | Ostrów | CMD4 | 57 RED | 25/26 |
|  |  |  |  |  | Zapasowe | 21/22 | Wysogotowo | CMD8 | 57 RED | 25/26 |

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| Poznań OTN | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G OTN | Karta 2-25 | Do Wysogotowo1 | 28 | 17/18 | Podstawowe | 13/14 | Wysogotowo1 | CMD6 | 68 RED | 47/48 |
|  |  |  |  |  | Zapasowe | 15/16 | Wysogotowo2 | CMD8 | 68 RED | 47/48 |
| 100G OTN | Karta 2-31 | Do Piły | 28 | 23/24 | Podstawowe | 19/20 | Piła | CMD2 | 62 RED | 35/36 |
|  |  |  |  |  | Zapasowe | 21/22 | Wysogotowo1 | CMD6 | 62 RED | 35/36 |
| 100G OTN | Karta 2-33 | Do Ostrowa | 28 | 11/12 | Podstawowe | 7/8 | Ostrów | CMD4 | 67 RED | 45/46 |
|  |  |  |  |  | Zapasowe | 9/10 | Wysogotowo2 | CMD8 | 67 RED | 45/46 |
| 100G OTN | Karta 2-37 | Do Wysogotowo2 | 28 | 5/6 | Podstawowe | 1/2 | Wysogotowo2 | CMD8 | 69 RED | 49/50 |
|  |  |  |  |  | Zapasowe | 3/4 | Wysogotowo1 | CMD6 | 69 RED | 49/50 |

Piła

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Piła ROADM | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G ASR | Karta 1-25 | Do Poznania | 27 | 17/18 | Podstawowe | 13/14 | Poznań | CMD6 | 58 RED | 27/28 |
|  |  |  |  |  | Zapasowe | 15/16 | Leszno | CMD2 | 58 RED | 27/28 |
| 100G ASR | Karta 1-31 | Do Leszna | 27 | 23/24 | Podstawowe | 19/20 | Leszno | CMD2 | 51 RED | 13/14 |
|  |  |  |  |  | Zapasowe | 21/22 | Poznań | CMD6 | 51 RED | 13/14 |
| 100G ASR | Karta 1-35 | Do Konina | 34 | 23/24 | Podstawowe | 19/20 | Konin | CMD4 | 52 RED | 15/16 |
|  |  |  |  |  | Zapasowe | 21/22 | Poznań | CMD6 | 52 RED | 15/16 |

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| Piła OTN | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G OTN | Karta 2-31 | Do Leszna | 34 | 5/6 | Podstawowe | 1/2 | Leszno | CMD2 | 60 RED | 31/32 |
|  |  |  |  |  | Zapasowe | 3/4 | Poznań | CMD6 | 60 RED | 31/32 |
| 100G OTN | Karta 2-33 | Do Konina | 34 | 11/12 | Podstawowe | 7/8 | Konin | CMD4 | 61 RED | 33/34 |
|  |  |  |  |  | Zapasowe | 9/10 | Poznań | CMD6 | 61 RED | 33/34 |
| 100G OTN | Karta 2-35 | Do Poznania | 34 | 17/18 | Podstawowe | 13/14 | Poznań | CMD6 | 62 RED | 35/36 |
|  |  |  |  |  | Zapasowe | 15/16 | Konin | CMD4 | 62 RED | 35/36 |

Ostrów

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ostrów ROADM | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G ASR | Karta 1-25 | Do Poznania | 27 | 17/18 | Podstawowe | 13/14 | Poznań | CMD6 | 57 RED | 25/26 |
|  |  |  |  |  | Zapasowe | 15/16 | Leszno | CMD2 | 57 RED | 25/26 |
| 100G ASR | Karta 1-31 | Do Leszna | 27 | 23/24 | Podstawowe | 19/20 | Leszno | CMD2 | 56 RED | 23/24 |
|  |  |  |  |  | Zapasowe | 21/22 | Poznań | CMD6 | 56 RED | 23/24 |
| 100G ASR | Karta 1-35 | Do Konina | 34 | 23/24 | Podstawowe | 19/20 | Konin | CMD4 | 54 RED | 19/20 |
|  |  |  |  |  | Zapasowe | 21/22 | Poznań | CMD6 | 54 RED | 19/20 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ostrów OTN | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G OTN | Karta 2-31 | Do Konina | 34 | 5/6 | Podstawowe | 1/2 | Konin | CMD4 | 63 RED | 37/38 |
|  |  |  |  |  | Zapasowe | 3/4 | Poznań | CMD6 | 63 RED | 37/38 |
| 100G OTN | Karta 2-33 | Do Leszna | 34 | 11/12 | Podstawowe | 7/8 | Leszno | CMD2 | 65 RED | 41/42 |
|  |  |  |  |  | Zapasowe | 9/10 | Poznań | CMD6 | 65 RED | 41/42 |
| 100G OTN | Karta 2-35 | Do Poznania | 34 | 17/18 | Podstawowe | 13/14 | Poznań | CMD6 | 67 RED | 45/46 |
|  |  |  |  |  | Zapasowe | 15/16 | Konin | CMD4 | 67 RED | 45/46 |

Konin

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Konin ROADM | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G ASR | Karta 1-25 | Do Wysogotowa | 27 | 17/18 | Podstawowe | 13/14 | Wysogotowo | CMD6 | 53 RED | 17/18 |
|  |  |  |  |  | Zapasowe | 15/16 | Piła | CMD2 | 53 RED | 17/18 |
| 100G ASR | Karta 1-31 | Do Piły | 27 | 23/24 | Podstawowe | 19/20 | Piła | CMD2 | 52 RED | 15/16 |
|  |  |  |  |  | Zapasowe | 21/22 | Wysogotowo | CMD6 | 52 RED | 15/16 |
| 100G ASR | Karta 1-35 | Do Ostrowa | 34 | 23/24 | Podstawowe | 19/20 | Ostrów | CMD4 | 54 RED | 19/20 |
|  |  |  |  |  | Zapasowe | 21/22 | Wysogotowo | CMD6 | 54 RED | 19/20 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Konin OTN | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G OTN | Karta 2-31 | Do Piły | 34 | 5/6 | Podstawowe | 1/2 | Piła | CMD2 | 61 RED | 33/34 |
|  |  |  |  |  | Zapasowe | 3/4 | Wysogotowo | CMD6 | 61 RED | 33/34 |
| 100G OTN | Karta 2-33 | Do Ostrowa | 34 | 11/12 | Podstawowe | 7/8 | Ostrów | CMD4 | 63 RED | 37/38 |
|  |  |  |  |  | Zapasowe | 9/10 | Wysogotowo | CMD6 | 63 RED | 37/38 |
| 100G OTN | Karta 2-35 | Do Wysogotowa | 34 | 17/18 | Podstawowe | 13/14 | Wysogotowo | CMD6 | 64 RED | 39/40 |
|  |  |  |  |  | Zapasowe | 15/16 | Ostrów | CMD4 | 64 RED | 39/40 |

Leszno

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Leszno ROADM | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G ASR | Karta 1-25 | Do Wysogotowa | 27 | 17/18 | Podstawowe | 13/14 | Wysogotowo | CMD6 | 55 RED | 21/22 |
|  |  |  |  |  | Zapasowe | 15/16 | Piła | CMD2 | 55 RED | 21/22 |
| 100G ASR | Karta 1-31 | Do Piły | 27 | 23/24 | Podstawowe | 19/20 | Piła | CMD2 | 51 RED | 13/14 |
|  |  |  |  |  | Zapasowe | 21/22 | Wysogotowo | CMD6 | 51 RED | 13/14 |
| 100G ASR | Karta 1-35 | Do Ostrowa | 34 | 23/24 | Podstawowe | 19/20 | Ostrów | CMD4 | 56 RED | 23/24 |
|  |  |  |  |  | Zapasowe | 21/22 | Wysogotowo | CMD6 | 56 RED | 23/24 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Leszno OTN | | | | | | | | | | |
| Usługa | Nr. Karty | Kierunek | OPS | Porty In/Out | Łącze | Porty In/Out | Kierunek | Filtr CMD | Fala | Porty CMD |
| 100G OTN | Karta 2-31 | Do Piły | 34 | 5/6 | Podstawowe | 1/2 | Piła | CMD2 | 60 RED | 31/32 |
|  |  |  |  |  | Zapasowe | 3/4 | Wysogotowo | CMD6 | 60 RED | 31/32 |
| 100G OTN | Karta 2-33 | Do Ostrowa | 34 | 11/12 | Podstawowe | 7/8 | Ostrów | CMD4 | 65 RED | 41/42 |
|  |  |  |  |  | Zapasowe | 9/10 | Wysogotowo | CMD6 | 65 RED | 41/42 |
| 100G OTN | Karta 2-35 | Do Wysogotowa | 34 | 17/18 | Podstawowe | 13/14 | Wysogotowo | CMD6 | 66 RED | 43/44 |
|  |  |  |  |  | Zapasowe | 15/16 | Ostrów | CMD4 | 66 RED | 43/44 |