

OSDP - Open Supervised Device Protocol

The Future of Access Control



Open Supervised Device Protocol (OSDP) is the future of Access Control. OSDP improves interoperability and increases security over standard Weigand systems.

The OSDP standard offers:

- > Higher security levels against hacks and other threats
- > Advanced Functionality
 - Two-way communication
 - Fewer conductors and a smaller cable
 - Advanced user interfaces
- > Ease of use
- > More interoperability
 - Communication between different manufacturers
 - Specification extendable to IP environments



RS-485 Communication - Non-Plenum

Catalog No.	No. of Pair	Conductor Type & Nom. DCR	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. OD	NEC Type	Nom. Capacitance & Impedance	Jacket Colors
			Inches		Inches	Inches			
D4851	1	24 AWG (7 x 32) TC 26 Ω/Mft	PE .020	Overall 100% Foil + 90% Braid	PVC .032	.275	CM	12.8 pf/ft 120 Ω	Gray
D2401	1	24 AWG (7 x 32) TC 26 Ω/Mft	Polyolefin .013	Overall 100% Foil	PVC .030	.160	CM	14.5 pf/ft 100 Ω	Gray



RS-485 Communication - Plenum

Catalog No.	No. of Pair/C	Cond. Type & Nom. DCR	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. OD	NEC Type	Nom. Capacitance & Impedance	Jacket Colors
			Inches		Inches	Inches			
1PR24P	1	24 AWG (7 x 32) TC 26 Ω/Mft	Foam FEP .025	Overall 100% Foil	Flex Plenum .015	.156	CMP	10.8 pf/ft 120 Ω	Orange
1PR22P	1	22 AWG (7x30) TC, 17 Ω/1000 ft	Foam FEP .023	Overall 100% Foil	Overall Flex Plenum PVC .020	.177	CMP	11.2 pf/ft 120 Ω	Orange
D254851	1	24 AWG (7 x 32) TC 26 Ω/Mft	Foam FEP .023	Overall 100% Foil + 90% Braid	Flex Plenum .017	.202	CMP	12.8 pf/ft 120 Ω	Gray
D252401	1	24 AWG (7 x 32) TC 26 Ω/Mft	FEP .013	Overall 100% Foil	Flex Plenum .015	.115	CMP	14.5 pf/ft 100 Ω	Gray
D25222P	2	22 AWG (7 x 30) TC 17 Ω/Mft	Foam FEP .0245	Individually Shielded Pair	Flex Plenum .018	.277	CMP	13.5 pf/ft 120 Ω	White
D252P24P	2	24AWG (7x32) TC 26Ω/1000 ft	Foam FEP .021	Overall 100% Foil Shield	Flex Plenum .016	.252	CMP	13.5 pf/ft 120 Ω	Black, Orange
AQC1P2218	1	22 AWG (7x30) TC 16.3 Ω/1000 ft	Foam PE Polyethylene .025	Overall 100% Foil Shield	Water-blocking Tape UV Resistant PVC .032	.275	Indoor/ Outdoor CM	13.5 pf/ft 120 Ω	Black
	2 Cond	18 AWG (7x26) BC 6.2 Ω/1000 ft	PVC .010	—					

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RS-485 Communication & Power

Catalog No.	No. of Pair	Conductor Type & Nom. DCR	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. OD	NEC Type	Nom. Capacitance & Impedance	Jacket Colors
			Inches		Inches				
1PR2418P	1	24 AWG (7 x 32) TC	Foam FEP .025	Overall 100% Foil	Overall Flex Plenum PVC .020	.244	CMP	12.8 pf/ft 120 Ω	Black White/ Orange Strip
	2	18 AWG (7x26) BC	Plenum PVC .010	—				23 pf/ft	
1PR2216P	1	22 AWG (7x30) TC	Foam FEP .030	Overall 100% Foil	Overall Flex Plenum PVC .020	.280	CMP	13.5 pf/ft 120 Ω	Black
	2	16 AWG (19x29) BC	Plenum PVC .008	—				23 pf/ft	



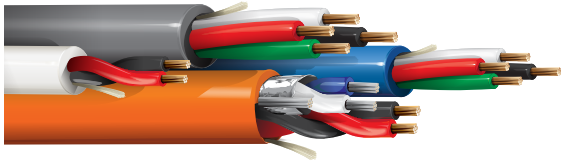
Outdoor RS-485 Water Block

Catalog No.	No. of Pair	Conductor Type & Nom. DCR	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. OD	NEC Type	Nom. Capacitance & Impedance	Jacket Color
			Inches		Inches				
DRS485DB	1	22 AWG (7x30) TC, 17 Ω/ 1000 ft	Foam FEP .029	100% Aluminum Foil + 65% Tinned Braid + Water-blocking Tape	CPE - Chlorinated Polyethylene	.339	CM Indoor - Outdoor Direct Burial	11.2 pf/ft 120 Ω	Black
2PR485DB	2	22 AWG (7x30) TC, 17 Ω/ 1000 ft	Foam PE .025	100% Aluminum Foil + 65% Tinned Braid	CPE - Chlorinated Polyethylene	.387	CM Indoor - Outdoor Direct Burial	11 pf/ft 120 Ω	Black
OSP1PR24	1	24 AWG (7X32) TC 26 Ω/1000 ft	Foam PE .016 in	100% Aluminum Foil + Water-blocking Tape	Polyethylene .020 in	.183 in	Outdoor OSP Burial	12.5 pf/ft 100 Ω	Orange

Insulation Color Code

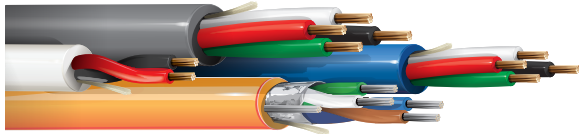
Catalog No.	Color Code
DRS485DB D4851 D254851 1PR24P	1 Pair: Blue/White, White/Blue
D2401 D252401	1 Pair: Black, Red
1PR2418P 1PR2216P AQC1P2218	Data Pair: 1. Blue/White, 2. White/Blue Power: 1.Black, 2.Red
D25222P D252P24P	1. White/Green 2. Brown/Blue
1PR22P	1. Black, 2. White
2PR485DB	1. White/Blue Stripe & Blue/White Stripe, 2. White/Orange Stripe & Orange/White Stripe

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Catalog No.	Component	No. of Cond.	Cond. Type	Insulation Type	Shielding	NEC Type	Nom. Capacitance & Impedance	Jacket Color
BPOSDP	OSDP Reader	1 Pair Data 2 Cond. Power	24 AWG (7x32) TC - Data 18 AWG (7x26) BC Power	Foam FEP Data PVC Power	100% Al. Foil Data None - Power	CMP	13.5 pf/ft 120 Ω Data Pair	Orange
	Door Contact	2 Cond.	22 AWG (7x30) BC	PVC	2 Cond.		—	White
	Lock Power	4 Cond.	18 AWG (7x26) BC	PVC	None		—	Blue
	REX/Spare	4 Cond.	22 AWG (7x30)	PVC	None		—	Gray

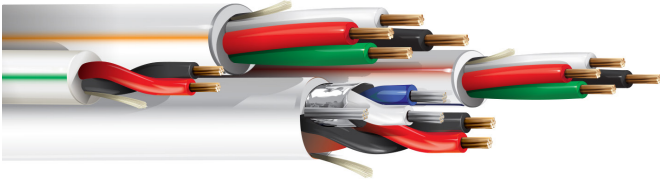
Overall Cable Construction	
Jacket Type	None - Banana Peel Unjacketed
Cable OD	.455 in



Catalog No.	Component	No. of Cond.	Cond. Type	Insulation Type	Shielding	NEC Type	Nom. Capacitance & Impedance	Jacket Color
BP2OSDP	OSDP Reader	2 Pair	24 AWG (7x32) TC	Foam FEP .021 in	100% Al. Foil Data None - Power	CMP	13.5 pf/ft 120 Ω Data Pair	Orange
	Door Contact	4 Cond.	22 AWG (7x30) BC	PVC	None		—	White
	Lock Power	4 Cond.	18 AWG (7x26) BC	PVC	None		—	Blue
	REX/Spare	4 Cond.	22 AWG (7x30)	PVC	None		—	Gray

Overall Cable Construction	
Jacket Type	None - Banana Peel Unjacketed
Cable OD	.472 in

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Catalog No.	Component	No. of Cond.	Cond. Type	Insulation Type	Shielding	NEC Type	Nom. Capacitance & Impedance	Jacket Color
BP22OSDP	OSDP Reader	1 Pair Data 2 Cond. Power	22 AWG (7x30) TC - Data 18 AWG (7x26) BC Power	Foam FEP Data PVC Power	100% Al. Foil Data None - Power	CMP	13.5 pf/ft 120 Ω Data Pair	White
	Door Contact	2 Cond.	22 AWG (7x30) BC	PVC	2 Cond.		—	White/GN Stripe
	Lock Power	4 Cond.	18 AWG (7x26) BC	PVC	None		—	White/OR Stripe
	REX/Spare	4 Cond.	22 AWG (7x30)	PVC	None		—	White/Red Stripe

Overall Cable Construction	
Jacket Type	None - Banana Peel Unjacketed
Cable OD	.455 in



Catalog No.	Component	No. of Cond.	Cond. Type	Insulation Type	Shielding	NEC Type	Nom. Capacitance & Impedance	Jacket Color
AQCOSDP	OSDP Reader	1 Pair Data 2 Cond. Power	24 AWG (7x32) TC - Data 18 AWG (7x26) BC Power	Foam PE Data PVC Power	100% Al. Foil Data None - Power Water-block Tape	CM Indoor/ Outdoor	13.5 pf/ft 120 Ω Data Pair	Orange
	Door Contact	2 Cond.	22 AWG (7x30) BC	PVC	Water-block Tape		—	White
	Lock Power	4 Cond.	18 AWG (7x26) BC	PVC	Water-block Tape		—	Blue
	REX/Spare	4 Cond.	22 AWG (7x30)	PVC	Water-block Tape		—	Gray

Overall Cable Construction	
Jacket Type	UV Resistant PVC
Cable OD	.595 in