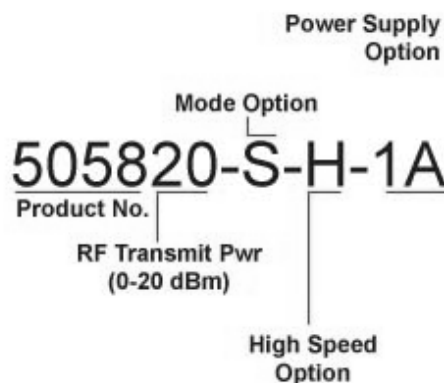# Product Catalog

October 2003

AN-50 System

You can purchase our systems either as a *bundled packages* or as *individual components*. The list below outlines the available product alternatives for both purchase options. Even though the *components are the same in both the bundled package and the individual components lists* the *order numbers will be different*. Please make sure that the order number you specify corresponds to the purchase option intended.

To configure your system please choose a "bundle " based on the following formula **5058_ _-_-_- _**. 5058 is the base unit, it is common to all bundled packages. Please refer to the pictogram order sample and table below for an illustration and description of each option.

```
                                           Power Supply
                                              Option

                    Mode Option

          505820-S-H-1A
          Product No.

          RF Transmit Pwr
            (0-20 dBm)
                                              High Speed
                                                Option
```

Bundle Order Options

Product No.: Common to all bundles. Choose **5058** for all AN-50 Systems.

RF Transmit Pwr: Can be set to any value from **00** to **20** dBm. Select the maximum transmit power that conforms with the regulatory requirements in your region.

Mode Option: The AN-50 can be configured with one of three mode options. Choose "**P**" for Point-to-Point only, "**S**" for Point-to-Multipoint Subscriber Station and "**B**" for Point-to-Multipoint Base Station.

High Speed Option: Denotes the high speed software upgrade. Choose "**L**" for 16QAM or "**H**" for 64QAM.

Power Supply Option: The AN-50 can be configured with a single or dual power supply. Choose "**1A**" for a single power supply version or "**2A**" for a dual power supply configuration.

AN-50 System - Bundled Package Options

Component	Order No.	Description
	5058**yy**	• Indoor Unit: Indoor network interface unit, AN-50 User Guide, 10/100 Ethernet port and power supply • Outdoor Unit: Outdoor 5.8 GHz radio unit with RF N-type connectors cable • Note: **yy** represents the maximum RF transmit power - yy can be set to any value from 00 to 20 (dBm), as per regulatory requirements for each region *Weight 2.0 kg* *Dimensions 431.8mm x 304.8mm x 44.45mm*
	P	Point to point only. Note this mode supports SNMP, CLI and Telnet.
	S	PMP SS Software: Point to Multipoint Subscriber Station system software. Required to communicate with a BS system loaded with 'B' Mode of Operation software.
	B	PMP BS Software: Point-to-Multipoint Base Station system software. Communicates only with subscriber stations loaded with 'S' Mode of Operation software. By default 64 CIDs are supported.
	L	16 QAM Software: Software supporting up to 16 QAM modulation (48 Mbps peak coded rate / 36 Mbps burst rate to Ethernet layer).
	H	64 QAM Software: Software supporting up to 64 QAM modulation (72 Mbps peak coded rate / 54 Mbps burst rate to Ethernet layer).
	1A	Single Power Supply: auto 110/220/240v, 60 watts for redundancy. Installed at factory.
	1D	Single DC Power Supply: 48 VDC, 60 watts. Installed at factory.
	2A	Optional Dual Power Supply: auto 110/220/240v, 60 watts for redundancy. Installed at factory.
	2D	Optional Dual DC Power Supply: 48V DC, 60 watts for redundancy. Installed at factory - added to existing single 48 VDC supply. Installed at factory.
	A2309MTF	Antenna: 1 foot, 9 degree, 23 dBi flat panel antenna (antenna bracket included). *Weight: 1.5 kg* *Size: 30x30 cm*

	A2804MTF	Antenna: 2 foot, 4.5 degree, 28 dBi flat panel antenna (antenna bracket included). *Weight: 5.0 kg* *Size: 60x60 cm*
	A2212RWP	Antenna: 1 foot, 12 degree, 22 dBi parabolic antenna (antenna bracket included). *Weight: 6.8 kg* *Size: 30 cm*
	A2806RWP	Antenna: 2 foot, 6.2 degree, 28 dBi parabolic antenna (antenna bracket included). *Weight: 9.9 kg* *Size: 60 cm*
	A3104RWP	Antenna: 3 foot, 4.2 degree, 31.2 dBi parabolic antenna (antenna bracket included). *Weight: 15.8 kg* *Size: 90 cm*
	A3403RWP	Antenna: 4 foot, 3.4 degree, 34.6 dBi parabolic antenna (antenna bracket included). *Weight: 27.0 kg* *Size: 120 cm*
	A6015MTS	Sector Antenna: 60 degree, 15 dBi sector antenna flat plate (antenna bracket included). *Weight: 3.0 kg* *Size: 43x30 cm*
	A9014MTS	Sector Antenna: 90 degree, 14 dBi sector antenna flat plate (antenna bracket included). *Weight: 2.2 kg* *Size: 43.6x25 cm*
	A6017RWS	Sector Antenna: 60 degree, 17 dBi sector antenna parabolic (antenna bracket included). *Weight: 7.0 kg* *Size: 65x21.6 cm*
	A9016RWS	Sector Antenna: 90 degree, 16 dBi sector antenna parabolic (antenna bracket included). *Weight: 7.0 kg* *Size: 65x21.6 cm*
	IF100	IF Cable: 100' RG-6U IF Cable with F-Type connectors. *Weight: 1.3 kg*
	IF150	IF Cable: 150' RG-6U IF Cable with F-Type connectors. *Weight: 2.0 kg*
	IF225	IF Cable: 225' RG-6U IF Cable with F-Type connectors. *Weight: 2.8 kg*

AN-50 System - Individual Components

Component	Order No.	Description
	S5058yy-IDU-1A	Indoor Unit: Indoor network interface unit with PTP software loaded, AN-50 User Guide, 10/100 Ethernet port and **single** 110 / 220 VAC, 60 Watt power supply. Note yy represents transmit power level from 00 to 20 (dBm) as per regulatory requirements for each region. *Weight: 2.0 kg* *Dimensions: 431.8mm x 304.8mm x 44.45mm*
	S5058yy-IDU-2A	Indoor Unit: Indoor network interface unit with PTP software loaded, AN-50 User Guide, 10/100 Ethernet port and **dual** 110 / 220 VAC, 60 Watt power supply. Note yy represents transmit power level from 00 to 20 (dBm) as per regulatory requirements for each region. *Weight: 2.0 kg* *Dimensions: 431.8mm x 304.8mm x 44.45mm*
	ST-58	Outdoor Unit: Outdoor 5.8 GHz radio unit with RF N-type connectors cable. *Weight: 1.0 kg*
	SAN50-BSM	PMP BS 16QAM Software: Point-to-Multipoint Base Station system software supporting transparent learning bridge application. With 48 Mbps peak coded rate (36 Mbps burst rate to Ethernet layer). By default 64 CIDs are supported.
	SAN50-SSM	PMP SS Software: Point-to-Multipoint Subscriber Station software that can communicate with the SAN50-BSM only.
	SAN50-64Q	64 QAM Software: Point-to-Point and Point-to-Multipoint system software supporting up to 64 QAM modulation (72 Mbps peak coded rate / 54 Mbps burst rate to Ethernet layer).
	SA2309MTF	Antenna: 1 foot, 9 degree, 23 dBi flat panel antenna (antenna bracket not included). *Weight: 1.5 kg* *Size: 30x30 cm*
	SA2804MTF	Antenna: 2 foot, 4.5 degree, 28 dBi flat panel antenna (antenna bracket not included). *Weight: 5.0 kg* *Size: 60x60 cm*
	SA2212RWP	Antenna: 1 foot, 12 degree, 22 dBi parabolic antenna (antenna bracket included). *Weight: 6.8 kg* *Size: 30 cm*

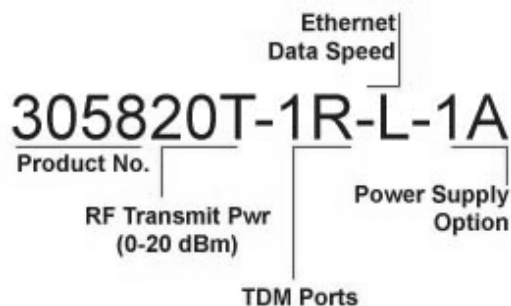|		
	SA2806RWP	Antenna: 2 foot, 6.2 degree, 28 dBi parabolic antenna (antenna bracket included). *Weight: 9.9 kg* *Size: 60 cm*
	SA3104RWP	Antenna: 3 foot, 4.2 degree, 31.2 dBi parabolic antenna (antenna bracket included). *Weight: 15.8 kg* *Size: 90 cm*
	SA3403RWP	Antenna: 4 foot, 3.4 degree, 34.6 dBi parabolic antenna (antenna bracket included). *Weight: 27.0 kg* *Size: 120 cm*
	SA6015MTS	Sector Antenna: 60 degree, 15 dBi sector antenna flat plate (antenna bracket not included) *Weight: 3.0 kg* *Size: 43x30 cm*
	SA9014MTS	Sector Antenna: 90 degree, 14 dBi sector antenna flat plate (antenna bracket not included) *Weight: 2.2 kg* *Size: 43.6x25 cm*
	SA6017RWS	Sector Antenna: 60 degree, 17 dBi sector antenna parabolic (antenna bracket included) *Weight: 7.0 kg* *Size: 65x21.6 cm*
	SA9016RWS	Sector Antenna: 90 degree, 16 dBi sector antenna parabolic (antenna bracket included). *Weight: 7.0 kg* *Size: 65x21.6 cm*
	SV-Mast	Antenna Brackets: Vertical Mast Mount Kit for SA2309MF, SA2804MF, SA6015MF and SA9014MF. *Weight: 3.0 kg*
	ST58-BKT	Transceiver bracket - to mount T-58 onto pole. *Weight: 0.5 kg*
	SAN50-Manual	Manual: AN-50 User Guide.

	SRFN	RF Cable: RF cable with N-Type connectors.
	SIF100	IF Cable: 100' RG-6U IF Cable with F-Type connectors. *Weight: 1.3 kg*
	SIF150	IF Cable: 150' RG-6U IF Cable with F-Type connectors. *Weight: 2.0 kg*
	SIF225	IF Cable: 225' RG-6U IF Cable with F-Type connectors. *Weight: 2.8 kg*

AN-30 System

You can purchase our systems either as a *bundled packages* or as *individual components*. The list below outlines the available product alternatives for both purchase options. Even though the *components are the same in both the bundled package and the individual components lists* the *order numbers will be different*. Please make sure that the order number you specify corresponds to the purchase option intended.

To configure your system please choose a "bundle" based on the following formula *3058_ _ _-_ _-_-_ _*. 3058 is the base unit, it is common to all bundled packages. Please refer to the pictogram order sample and table below for an illustration and description of each option.

Bundle Order Options

Product No.: Common to all bundles. Choose **3058** for all AN-30 Systems.

RF Transmit Pwr: Can be set to any value from **00** to **20** dBm. Select the transmit power that conforms with the regulatory requirements in your region.
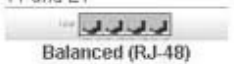
T1/E1 Ports: The AN-30 can be configured with up to **4** T1/E1 ports. There are options for both T1 and E1 equipped units. Please refer to the table below for the correct order number for your configuration.

Ethernet Data Speed: The An-30 as an available "L" Low Speed or "H" High Speed Ethernet data port. Select the one which applies to your configuration. Configuration details are outlined in the table below.

Power Supply Option: The AN-30 can be configured with a single or dual AC/DC power supply. Order number and configuration details are outlined below.

AN-30 System - Bundled Package Options

Component	Order No.	Description
	3058**yy**T	• Indoor Unit: Indoor network interface unit with PTP software loaded, supporting **T1** (see next item for number of ports) and basic Ethernet for system management, AN-30 User Guide, one power supply (see below for options). • Outdoor Unit: Outdoor 5.8 GHz radio unit with RF N-type connector cable • Where **yy** represents the maximum RF transmit power - set to any value from 00 to 20 (dBm), to satisfy regulatory power requirements for each region. *Weight 2.5 kg, Dimensions 431.8mm x 304.8mm x 44.45mm*
	3058**yy**E	• Indoor Unit: Indoor network interface unit with PTP software loaded, supporting **E1** (see next item for number of ports) and basic Ethernet for system management, AN-30 User Guide, one power supply (see below for options). • Outdoor Unit: Outdoor 5.8 GHz radio unit with RF N-type connector cable • Where **yy** represents the maximum RF transmit power - set to any value from 00 to 20 (dBm), to satisfy regulatory power requirements for each region. *Weight 2.5 kg, Dimensions 431.8mm x 304.8mm x 44.45mm*
E1 Only Unbalanced (BNC)	1B 2B 4B	One BNC connector (for 3058yyE IDU only) Two BNC connectors (for 3058yyE IDU only) Four BNC connectors (for 3058yyE IDU only)
T1 and E1 Balanced (RJ-48)	1R 2R 3R	One RJ-48 connector (for both 3058yyE and 3058yyT IDUs) Two RJ-48 connectors (for both 3058yyE and 3058yyT IDUs) Four RJ-48 connectors (for both 3058yyE and 3058yyT IDUs)
	L	Ethernet Data Rate Upgrade (low speed option): Point-to-Point system software supporting the following data rates* depending on the number and type of T1/E1 ports enabled: *(see table below)* ** assumes sufficient link budget*

No. of E1 (T1) ports	Low speed option
1 (1)	27 (28) Mbps
2 (2)	22 (24) Mbps
4 (4)	12 (17) Mbps

	1D	Single DC Power Supply: 48 VDC, 60 watts. Installed at factory.
	2D	Optional Dual DC Power Supply: 48V DC, 60 watts for redundancy. Installed at factory - added to existing single 48 VDC supply. Installed at factory.
	1A	Single Power Supply: auto 110/220/240v, 60 watts for redundancy. Installed at factory.
	2A	Optional Dual Power Supply: auto 110/220/240v, 60 watts for redundancy. Installed at factory.
	A2309MTF	Antenna: 1 foot, 9 degree, 23 dBi flat panel antenna (antenna bracket included). Weight: 1.5 kg Size: 30x30 cm
	A2804MTF	Antenna: 2 foot, 4.5 degree, 28 dBi flat panel antenna (antenna bracket included). Weight: 5.0 kg Size: 60x60 cm
	A2212RWP	Antenna: 1 foot, 12 degree, 22 dBi parabolic antenna (antenna bracket included). Weight: 6.8 kg Size: 30 cm
	A2806RWP	Antenna: 2 foot, 6.2 degree, 28 dBi parabolic antenna (antenna bracket included). Weight: 9.9 kg Size: 60 cm
	A3104RWP	Antenna: 3 foot, 4.2 degree, 31.2 dBi parabolic antenna (antenna bracket included). Weight: 15.8 kg Size: 90 cm
	A3403RWP	Antenna: 4 foot, 3.4 degree, 34.6 dBi parabolic antenna (antenna bracket included). Weight: 27.0 kg Size: 120 cm
	IF100	IF Cable: 100' RG-6U IF Cable with F-Type connectors. Weight: 1.3 kg
	IF150	IF Cable: 150' RG-6U IF Cable with F-Type connectors. Weight: 2.0 kg
	IF225	IF Cable: 225' RG-6U IF Cable with F-Type connectors. Weight: 2.8 kg

AN-30 System - Individual Components

Component	Order No.	Description
	S3058**yy**T-IDU-R-1z	- Indoor Unit: Indoor network interface unit with PTP software load, supporting T1/E1 and basic Ethernet for system management, AN-30 User Guide, single power supply, and a **single T1 RJ-48 port.** - Where yy represents the maximum RF transmit power - set to any value from 00 to 20 (dBm) to satisfy regulatory power requirements for each region. - Where z represents AC or DC power supply - for AC power supply z value is set to A and for DC power supply z value is set to D. *Weight 2.5 kg, Dimensions 431.8mm x 304.8mm x 44.45mm*
	S3058**yy**E-IDU-x-1z	- Indoor Unit: Indoor network interface unit with PTP software load, supporting T1/E1 and basic Ethernet for system management, AN-30 User Guide, sngle power supply, and a **single E1 port**. - Where x is either B (for BNC connector) or R (for RJ-48 connector). - Where yy represents the maximum RF transmit power - set to any value from 00 to 20 (dBm) to satisfy regulatory power requirements for each region. - where z represents AC or DC power supply - for AC power supply z value is set to A and for DC power supply z value is set to D. *Weight 2.5 kg, Dimensions 431.8mm x 304.8mm x 44.45mm*
	S3058**yy**T-IDU-R-2z	- Indoor Unit: Indoor network interface unit with PTP software load, supporting T1/E1 and basic Ethernet for system management, AN-30 User Guide, dual power supply, and a **single T1 RJ-48 port**. - Where yy represents the maximum RF transmit power - set to any value from 00 to 20 (dBm) to satisfy regulatory power requirements for each region. - Where z represents AC or DC power supply - for AC power supply z value is set to A and for DC power supply z value is set to D. *Weight 2.5 kg, Dimensions 431.8mm x 304.8mm x 44.45mm*

	S3058**yy**E-IDU-x-2z	• Indoor Unit: Indoor network interface unit with PTP software load, supporting T1/E1 and basic Ethernet for system management, AN-30 User Guide, dual power supply, and a **single E1 port.** • Where x is either B (for BNC connector) or R (for RJ-48 connector). • Where yy represents the maximum RF transmit power - set to any value from 00 to 20 (dBm) to satisfy regulatory power requirements for each region. • Where z represents AC or DC power supply - for AC power supply z value is set to A and for DC power supply z value is set to D. *Weight 2.5 kg, Dimensions 431.8mm x 304.8mm x 44.45mm*
	ST-58	Outdoor Unit: Outdoor 5.8 GHz radio unit with RF N-type connectors cable. *Weight: 1.0 kg*
	SAN30-T1/E1-x	• x = 1, add a T1/E1 port to the AN-30 with a single port already enabled. • x = 2, add two additional T1/E1 ports to the AN-30 with two ports already enabled. • x = 3, add three additional T1/E1 ports to the AN-30 with a single port already enabled.

| | SAN30-L | Ethernet Data Rate Upgrade (low speed option): Point-to-Point system software supporting the following data rates* depending on the number and type of T1/E1 ports enabled: |

No. of E1 (T1) ports	Low speed option
1 (1)	27 (28) Mbps
2 (2)	22 (24) Mbps
4 (4)	12 (17) Mbps

* assumes sufficient link budget

| | SAN30-H | Ethernet Data Rate Upgrade (high speed option): Point-to-Point system software supporting the following data rates* depending on the number and type of T1/E1 ports enabled: |

No. of E1 (T1) ports	High speed option
1 (1)	43 (44) Mbps
2 (2)	38 (40) Mbps
4 (4)	28 (33) Mbps

* assumes sufficient link budget

		SA2309MTF	Antenna: 1 foot, 9 degree, 23 dBi flat panel antenna (antenna bracket not included).
			Weight: 1.5 kg
			Size: 30x30 cm
		SA2804MTF	Antenna: 2 foot, 4.5 degree, 28 dBi flat panel antenna (antenna bracket not included).
			Weight: 5.0 kg
			Size: 60x60 cm
		SA2212RWP	Antenna: 1 foot, 12 degree, 22 dBi parabolic antenna (antenna bracket included).
			Weight: 6.8 kg
			Size: 30 cm
		SA2806RWP	Antenna: 2 foot, 6.2 degree, 28 dBi parabolic antenna (antenna bracket included).
			Weight: 9.9 kg
			Size: 60 cm
		SA3104RWP	Antenna: 3 foot, 4.2 degree, 31.2 dBi parabolic antenna (antenna bracket included).
			Weight: 15.8 kg
			Size: 90 cm
		SA3403RWP	Antenna: 4 foot, 3.4 degree, 34.6 dBi parabolic antenna (antenna bracket included).
			Weight: 27.0 kg
			Size: 120 cm
		SV-Mast	Antenna Brackets: Vertical Mast Mount Kit for SA2309MF, SA2804MF.
			Weight: 3.0 kg
		ST58-BKT	Transceiver bracket - to mount T-58 onto pole.
			Weight: 0.5 kg

	ST58-BKT	Transceiver bracket - to mount T-58 onto pole. *Weight: 0.5 kg*
	SAN30-Manual	Manual: AN-30 User Guide.
	SRFN	RF Cable: RF cable with N-Type connectors.
	SIF100	IF Cable: 100' RG-6U IF Cable with F-Type connectors. *Weight: 1.3 kg*
	SIF150	IF Cable: 150' RG-6U IF Cable with F-Type connectors. *Weight: 2.0 kg*
	SIF225	IF Cable: 225' RG-6U IF Cable with F-Type connectors. *Weight: 2.8 kg*

Redline Communications Inc. is a privately held Canadian company located in the Greater Toronto area, focusing on product innovations in the broadband fixed wireless industry. Redline's products deliver a cost-effective wireless solution for backhaul and infrastructure, used by access providers, enterprises, wireless ISPs and more.