## March 31, 2018

Product Snapshot

### Essex Micro Cap Growth Strategy

Asset Class:	United States-Equity	Key Facts Displayed in P	roduct Base Currency - US Dollar (USD)
Primary Universe:	eVestment US Micro Cap Growth Equity	Primary Capitalization:	Micro Cap
,		Primary Style Emphasis:	Growth
Marketing Contact:	Ken Rogers	Preferred Benchmark:	Russell Microcap Growth
Title:	Marketing Contact	Total Product Assets:	\$36.9
Phone/Fax:	914-251-1084 /	Total Product Accounts:	4
•		Product Offered As:	SA
Email Address:	ken@arrowpartners.com	Investment Focus:	Long Only

## Asset & Account Information Displayed In Product Base Currency - US Dollar (USD)

Current Totals	Assets (\$ Million)	Accounts		Assets by Vehicle	Type <u>Assets (</u> \$	Million)	
Total in Product	\$36.9	4		Separate/Segregated	Assets \$34	1.5	
Total Taxable	\$2.4	1		Pooled/Commingled A	ssets \$2	.4	
Total Tax-Exempt	\$34.5	3		Mutual Fund/Institution	onal Assets \$0	.0	
Total Institutional	\$36.9	4		Mutual Fund/Retail As	sets \$0	.0	
Accounts Gained	Number	(\$ Million)	<u>% Product Assets</u>	Assets Lost	Number	(\$ Million)	<u>% Product Assets</u>
Current Quarter	0	\$0.0	0.0 %	Current Quarter	0	\$0.0	0.0 %
2017	1	\$21.8	174.5 %	2017	0	\$0.0	0.0 %
2016	2	\$10.6	594.4 %	2016	0	\$0.0	0.0 %

## Portfolio Characteristics Displayed In Product Base Currency - US Dollar (USD)

Strategy Snapshot		Fundamental Characteristics		Market Capitalization Brea	kdown
Primary Capitalization:	Micro Cap	Current Cash Position:	4.1 %	>\$50 Billion:	0.00 %
Primary Style Emphasis:	Growth	Annual Turnover (LTM):	49 %	\$15-50 Billion:	0.00 %
Preferred Benchmark:	Russell Microcap Growth	Current P/E (12-mo Trailing):	28.19x	\$7.5-15 Billion:	0.00 %
Secondary Style Emphasis:		Current P/B (12-mo Trailing):	2.37x	\$1.5-7.5 Billion:	6.62 %
Current Number Of Holdings:	100	Current P/S (12-mo Trailing):	1.07x	\$750 Million-1.5 Billion:	6.45 %
Foreign Securities Utilized:		Earnings Growth (Past 5 Yrs):		\$400 Million-750 Million:	19.65 %
Approach Towards Currency Hedging:		Weighted Avg. Mkt Cap (Mil):	\$491	<\$400 Million:	67.28 %
% Hedged Back to Local Currency:		Median Market Cap (Mil):	\$184		
% Max Allowed In Emerging Markets:					
Derivatives Utilized:	No				
Available Under Social Restrictions:	No				

## Performance Information Displayed In Vehicle Base Currency - US Dollar (USD)

Track Record (2 Available): Frequency:	USA - SA - Composite - Essex Micro Cap Growth Strategy - Gross of Fees Monthly					<u>Risk Index:</u> <u>Risk-Free Index:</u>	Russell Microcap Citigroup 3-Mont		
		Returns		_					
Trailing Periods	Product	<u>Benchmark</u>	Excess	Std Dev	<u>Alpha</u>	<u>Beta</u>	<u>Trk Error</u>	<u>Info Ratio</u>	<u>Sharpe Ratio</u>
1 Year	19.43	14.79	4.64	10.15	6.13	0.87	6.15	0.75	1.81
2 Year	20.47	17.48	2.99	10.67	6.93	0.75	6.81	0.44	1.85
3 Year	8.52	4.65	3.87	12.95	5.08	0.68	8.14	0.48	0.62
4 Year	6.43	4.76	1.66	13.00	2.99	0.67	8.24	0.20	0.47
5 Year	13.98	10.91	3.07	13.40	5.93	0.70	8.19	0.37	1.02
6 Year	16.52	11.39	5.13	14.53	7.28	0.77	7.95	0.65	1.12
7 Year	13.46	9.48	3.98	15.87	5.49	0.80	7.58	0.52	0.83
8 Year	16.69	12.00	4.69	17.37	5.97	0.85	7.33	0.64	0.95
9 Year	21.93	16.73	5.20	18.14	6.65	0.87	7.19	0.72	1.20
10 Year	13.33	9.35	3.98	20.97	4.54	0.91	7.35	0.54	0.62
Since Inception (10/2007)	9.80	6.35	3.45	21.56	3.81	0.93	7.46	0.46	0.43
Calendar Years Product Returns: Benchmark Returns: Excess Returns:	MRQ 0.07 0.99 -0.92	<b>YTD</b> 0.07 0.99 -0.92	27.71 27.71 16.65 11.06	2016 8.76 6.86 1.90	2015 -7.62 -3.85 -3.76	2014 4.43 4.30 0.13	<b>2013</b> 78.29 52.84 25.45	2012 21.18 15.17 6.01	<b>2011</b> -10.21 -8.42 -1.79

Professional Information

Fee Information Displayed In Product Base Currency - US Dollar (USD)

Vehicle Type	<u>Available</u>	Min. Size(\$ Mil)	Minimum Fee	
Separate/Segregated	Open	\$3	\$45,000	
Pooled/Commingled	Not Available			
Mutual Fund	Not Available			
Fees By Acct. Size	\$25M	\$50M	\$75M	\$100M
Separate/Segregated	\$312,500	\$625,000	\$937,500	\$1,250,000
	125bps	125bps	125bps	125bps
Pooled/Commingled				
Mutual Fund				

Team Description Portfolio Managers: Research Analysts: Traders: Risk Portfolio/Monitoring:	<u>No.</u>  	Avg. Yrs. Exp.    	<u>Avg. Yrs. @ Firm</u>    
Professional Turnover Professionals Gained	MRQ 2017 2016	Port Mgrs. 0 0 0	Analysts 0 0 0
Professionals Lost	MRQ 2017 2016	0 0 0	0 0 0



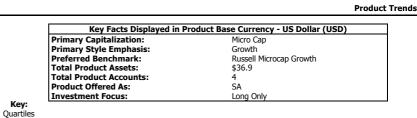
## Essex Investment Management Company, LLC

## March 31, 2018

## **Essex Micro Cap Growth Strategy**

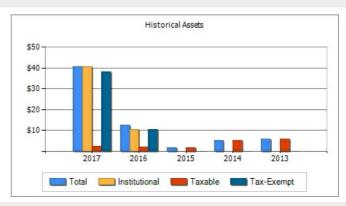
Asset Class:
Primary Universe:
Marketing Contact:
Title:
Phone/Fax:
Email Address:

United States-Equity eVestment US Micro Cap Growth Equity Ken Rogers Marketing Contact 914-251-1084 / ken@arrowpartners.com



#### Historical Product Assets Displayed In Product Base Currency - US Dollar (USD)

Category	2017	2016	2015	2014	2013
Total	\$40.6	\$12.5	\$1.8	\$5.3	\$5.8
Institutional	\$40.6	\$10.6	\$0.0	\$0.0	\$0.0
Taxable	\$2.4	\$1.9	\$1.8	\$5.3	\$5.8
Tax-Exempt	\$38.2	\$10.6	\$0.0	\$0.0	\$0.0



#### Universe Ranking Analysis vs eVestment US Micro Cap Growth Equity Displayed In Vehicle Base Currency - US Dollar (USD)

Key:

1st 2nc 3rd 4th

Annualized R	eturns (Peric	ods Ending	g March 31	, 2018)			
Percentile	MRQ	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
5th	5.76	5.76	35.95	22.39	22.62	16.01	15.80
25th	3.15	3.15	24.95	14.62	19.08	15.15	15.13
Median	0.79	0.79	20.24	9.47	14.19	12.74	12.92
75th	-0.39	-0.39	15.06	7.34	12.74	11.64	12.35
95th	-2.20	-2.20	10.53	5.78	11.24	10.13	11.31
Product	0.07	0.07	19.43	8.52	13.98	13.46	13.33
Rank	71	71	57	57	54	45	37



Calendar Year	Returns				
	2017	2016	2015	2014	2013
Median	26.06	12.30	-2.12	2.12	59.21
Product Rank	27.71 40	8.76 77	-7.62 79	4.43 28	78.29 5
	2012	2011	2010	2009	2008
Median	13.47	-5.88	36.80	42.01	-45.02
Product Rank	21.18 6	-10.21 74	43.70 24	49.85 30	-50.29 78



Rolling 3-Year Ro	eturns (Periods Er	nding)			
	3/18	12/17	9/17	6/17	3/17
Median	9.47	11.23	14.41	8.06	4.83
Product Rank	8.52 57	8.67 73	10.98 80	6.07 79	2.41 73
	12/16	9/16	6/16	3/16	12/15
Median	3.64	6.56	7.23	8.59	15.24
Product Rank	1.62 69	6.19 56	6.44 53	9.85 36	19.82 28



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## Essex Investment Management Company, LLC

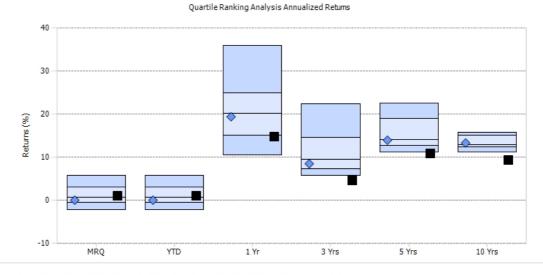
## March 31, 2018

Universe Rank

Essex Micro Cap Growth Strategy

Key Facts Displayed in Product Base Currency - US Dollar (USD) Asset Class: United States-Equity Primary Capitalization: Primary Style Emphasis: Preferred Benchmark: Total Product Assets: Micro Cap Growth Primary Universe: eVestment US Micro Cap Growth Equity Marketing Contact: Ken Rogers Russell Microcap Growth \$36.9 Title: Marketing Contact **Total Product Accounts:** 914-251-1084 / Phone/Fax: SA Product Offered As: Email Address: ken@arrowpartners.com Investment Focus: Long Only

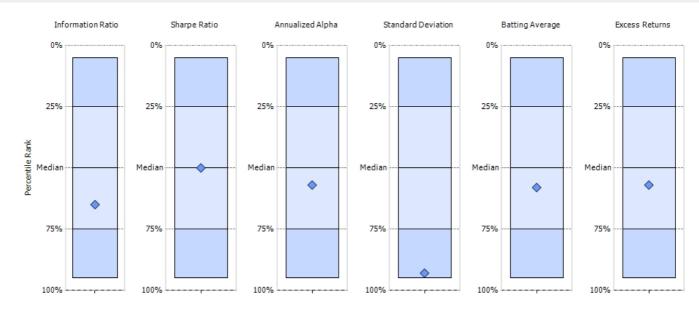
Peer Group Statistics And Ranking vs. eVestment US Micro Cap Growth Equity Displayed In Vehicle Base Currency - US Dollar (USD)



♦ Essex: Essex Micro Cap Growth Strategy ■ Benchmark: Russell Microcap Growth

	MRQ		YTD		1 Yr		3 Yrs		5 Yrs		10 Yrs	
Firm/Product	Return	Rank										
Essex Investment Management Company, LLC	0.07	71	0.07	71	19.43	57	8.52	57	13.98	54	13.33	37
Russell Microcap Growth	0.99	43	0.99	43	14.79	75	4.65	100	10.91	99	9.35	100
Universe Median	0.79		0.79		20.24		9.47		14.19		12.92	

Three Year Statistics vs. eVestment US Micro Cap Growth Equity vs. Russell Microcap Growth Displayed In Vehicle Base Currency - US Dollar (USD)



	Information Ratio	Sharpe Ratio	Annualized Alpha	Standard Deviation	<b>Batting Average</b>	Excess Returns
Median	0.79	0.62	5.48	15.08	0.56	4.81
Product	0.48	0.62	5.08	12.95	0.53	3.87
Rank	65	50	57	93	58	57

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## Essex Investment Management Company, LLC

## March 31, 2018

Risk vs. Reward

Essex Micro Cap Growth Strategy
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Asset Class:United States-EquityPrimary Universe:eVestment US Micro Cap Growth EquityMarketing Contact:Ken RogersTitle:Marketing ContactPhone/Fax:914-251-1084 /Email Address:ken@arrowpartners.com

 Key Facts Displayed in Product Base Currency - US Dollar (USD)

 Primary Capitalization:
 Micro Cap

 Primary Style Emphasis:
 Growth

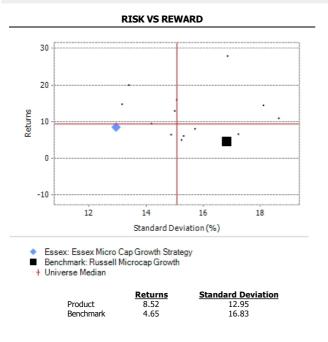
 Preferred Benchmark:
 Russell Microcap Growth

 Total Product Assets:
 \$36.9

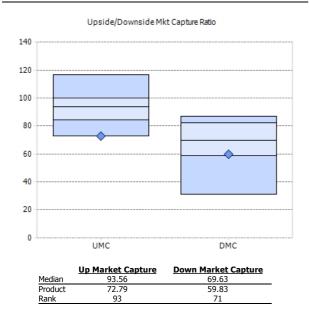
 Total Product Offered As:
 SA

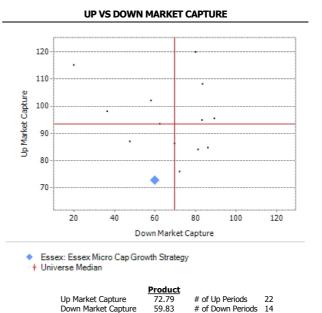
 Investment Focus:
 Long Only

Risk Vs Reward And Market Capture Analysis: 3 Years vs. eVestment US Micro Cap Growth Equity Displayed In Vehicle Base Currency - US Dollar (USD)

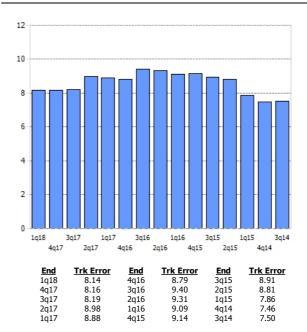


#### MARKET CAPTURE ANALYSIS: 3 YEARS





TRACKING ERROR: ROLLING 3-YEAR PERIODS



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# **Micro Cap Growth**

## 4th Quarter – 2017

Period	Gross Return	Net Return	Benchmark Return	Number of Portfolios	Total Composite Assets (USD millions)	Total Firm Assets (USD millions)	Composite Assets as a % of Total Firm Assets	Dispersion	Composite 3-year Standard Deviation	Benchmark 3-year Standard Deviation
2007	-4.2 %	-4.5 %	-6.0 %	≤ 5	\$1.6	\$2,868	0.1 %	-	-	-
2008	-50.3 %	-50.9 %	-44.7 %	≤ 5	\$0.8	\$1,547	0.0 %	-	-	-
2009	49.8 %	48.0 %	39.2 %	≤ 5	\$1.1	\$1,930	0.1 %	-	-	-
2010	43.7 %	42.0 %	29.5 %	≤ 5	\$1.6	\$1,470	0.1 %	-	31.0 %	29.1 %
2011	-10.2 %	-11.4 %	-8.4 %	≤ 5	\$1.4	\$1,058	0.1 %	-	24.6 %	25.2 %
2012	21.2 %	19.7 %	15.2 %	≤ 5	\$3.9	\$612	0.6 %	-	21.4 %	21.6 %
2013	78.3 %	76.2 %	52.8 %	≤ 5	\$5.8	\$740	0.8 %	-	18.6 %	18.5 %
2014	4.4 %	3.4 %	4.3 %	≤ 5	\$5.3	\$683	0.8 %	-	15.7 %	16.5 %
2015	-7.6 %	-8.6 %	-3.9 %	≤ 5	\$1.8	\$677	0.3 %	-	15.7 %	17.6 %
2016	8.8 %	7.7 %	6.9 %	≤ 5	\$12.5	\$606	2.1 %	-	13.7 %	19.4 %

Essex Investment Management Company, LLC ("Essex") claims compliance with the Global Investment Performance Standards (GIPS<sup>®</sup>) and has prepared and presented this report in compliance with the GIPS standards. Essex has been independently verified for the periods January 1, 1993 through December 31, 2016. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The Micro Cap Growth composite has been examined for the periods October 1, 2007 through December 31, 2016. The verification and performance examination reports are available upon request.

#### Notes:

1. Organization: Essex Investment Management Company, LLC ("Essex") is an independently owned investment management firm founded in 1976. Essex is a registered investment adviser with the SEC. The firm offers investment management services to individuals, institutional investors, separately managed sub-advisory account programs, and sub-advisory management services to mutual funds. When used herein, the term Essex also refers to the firm's predecessor, Essex Investment Management Company, Inc. On January 1, 2005, the Burridge Growth Partners division of the former The Burridge Group LLC merged with Essex. Burridge Growth Partners' portfolio manager, analysts and investment decision making process remained intact and its separately managed accounts continued under Essex's management.

2. Composite Definition: This composite includes all actual, fee-paying, fully discretionary accounts managed by Essex to seek capital appreciation by investing in micro capitalization growth companies. The use of leveraging, short positions and derivatives has not been used by any of the accounts. The composite was created on March 13, 2008.

3. Benchmark: The Russell Micro Cap<sup>®</sup> Growth Index contains those securities in the Russell Micro Cap Index with a greater-than average growth orientation, and includes reinvestment of dividends. The Russell Micro Cap<sup>®</sup> Growth Index is a trademark of Russell Investments. Russell Investments is the owner of the trademarks, service marks and copyrights related to its respective indexes. An index is a unmanaged, does not incur fees or expenses, and cannot be invested in directly. Benchmark returns are not covered by the report of independent verifiers.

4. Dispersion & Standard Deviation: Essex uses an asset-weighted standard deviation calculation to measure dispersion. Only portfolios that are included in the composite for the entire year have been included in the dispersion calculation; it is not presented for periods less than one year or when there are five or fewer portfolios in the composite. The three-year annualized standard deviation measures the variability of the composite and the benchmark returns over the preceeding 36 month period.

5. Fees: The standard advisory fee is: For all accredited investor accounts 1.0% on all assets. Essex's standard advisory fee schedules are described in its Part II of Form ADV. The above net returns are based on a model 1.0% advisory fee which is applied monthly to calculate the net performance numbers.

6. Calculation Methodology: Gross performance results presented are net of transaction costs, but before management fees, custody fees and other indirect expenses. Net performance results are presented net of the maximum applicable management fees, transaction costs, withholding taxes and direct expenses, but before custody fees and other indirect expenses. This composite does not incur any performance-based fees. Composite returns include the reinvestment of income and class action proceeds, if applicable. Actual returns will be reduced by investment advisory fees. Investment advisory fees are generally collected quarterly, which produces a compounding effect on the total rate of return net of management fees. As an example, the effect of investment advisory fees on the total value of a client's portfolio assuming 51,000,000 investment, portfolio return of 10% and a vear, and a 1.0% annual investment advisory fees. The five years compounded gross rate of return of 61.1% would be reduced to 53.2% after taking into account advisory fees. The actual fee charged to an individual account may differ from the standard schedule depending on a number of factors including account type and size.

**7. Other Matters/Disclosures:** A complete list and description of the firm's composites are available upon request. Additional information regarding the firm's policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request. Clients or prospective clients should not assume they will have an investment experience similar to that indicated by the past performance results of the composite. Valuations and returns are computed and stated in U.S. Dollars. Past composite performance is not necessarily predictive of how an investors' individual account will perform. Whenever the potential for profit exists, there is also the potential for loss. This document has been approved for use in one-on-one presentations only and Essex requires that third party consultants provide this performance information and the related disclosures only in one-on-one presentations. Registration as an investment adviser with the SEC does not imply a certain level of skill or training. Such registration in no way implies that the Securities and Exchange Commission approves or endorses Essex, its strategies, or any of its marketing materials.

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Additional information regarding policies for calculating and reporting returns is available upon request



Essex Investment Management Company, LLC www.essexinvest.com

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